STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: ML-47065	6. SURFACE: State
1A. TYPE OF WORK: DRILL ☑ REENTER ☐ DEEPEN ☐	7. IF INDIAN, ALLOTTEE OR TRIBE NAME:
B. TYPE OF WELL: OIL ☐ GAS ☑ OTHER _____ SINGLE ZONE ☐ MULTIPLE ZONE ☑	8. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: Enduring Resources, LLC	9. WELL NAME and NUMBER: Southam Canyon 10-25-14-32
3. ADDRESS OF OPERATOR: 475 17th St., Ste 1500 CITY Denver STATE CO ZIP 80220 / PHONE NUMBER: (303) 350-5114	10. FIELD AND POOL, OR WILDCAT: ~~Undesignated~~ Wildcat
4. LOCATION OF WELL (FOOTAGES) 660114 X 4418132 Y 39.900044 -109.127085 AT SURFACE: 703' FSL - 1881' FWL SE-SW 32-10S-25E AT PROPOSED PRODUCING ZONE: 658' FSL - 661' FWL SW-SW 32-10S-25E 1059742 X 4418111 39.899931 -109.131436	11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSW 32 10S 25E S
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 12.3 Southwest of Bonanza, UT	12. COUNTY: Uintah / 13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): 703' (SL) 658' (BHL)	16. NUMBER OF ACRES IN LEASE: 640 / 17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40 acres
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): 1000' +	19. PROPOSED DEPTH: 4,310 / 20. BOND DESCRIPTION: RLB0008031
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5818' RT-KB	22. APPROXIMATE DATE WORK WILL START: 9/1/2006 / 23. ESTIMATED DURATION: 20 days

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT			
20"	14" line pipe	40	3 yards	Ready Mix		
11"	8-5/8" J-55 24#	2,000	Premium Lead	138 sxs	3.50	11.1
			Premium Tail	138 sxs	1.15	15.8
7-7/8"	4-1/2" N-80 11.6#	4,310	Class G	11 sxs	3.3	11.0
			50/50 Poz Class G	456 sxs	1.56	14.3

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
☑ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
☑ COMPLETE DRILLING PLAN
☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE Al Arlian DATE 7/12/2006

(This space for State use only)

API NUMBER ASSIGNED: 43-047-38396

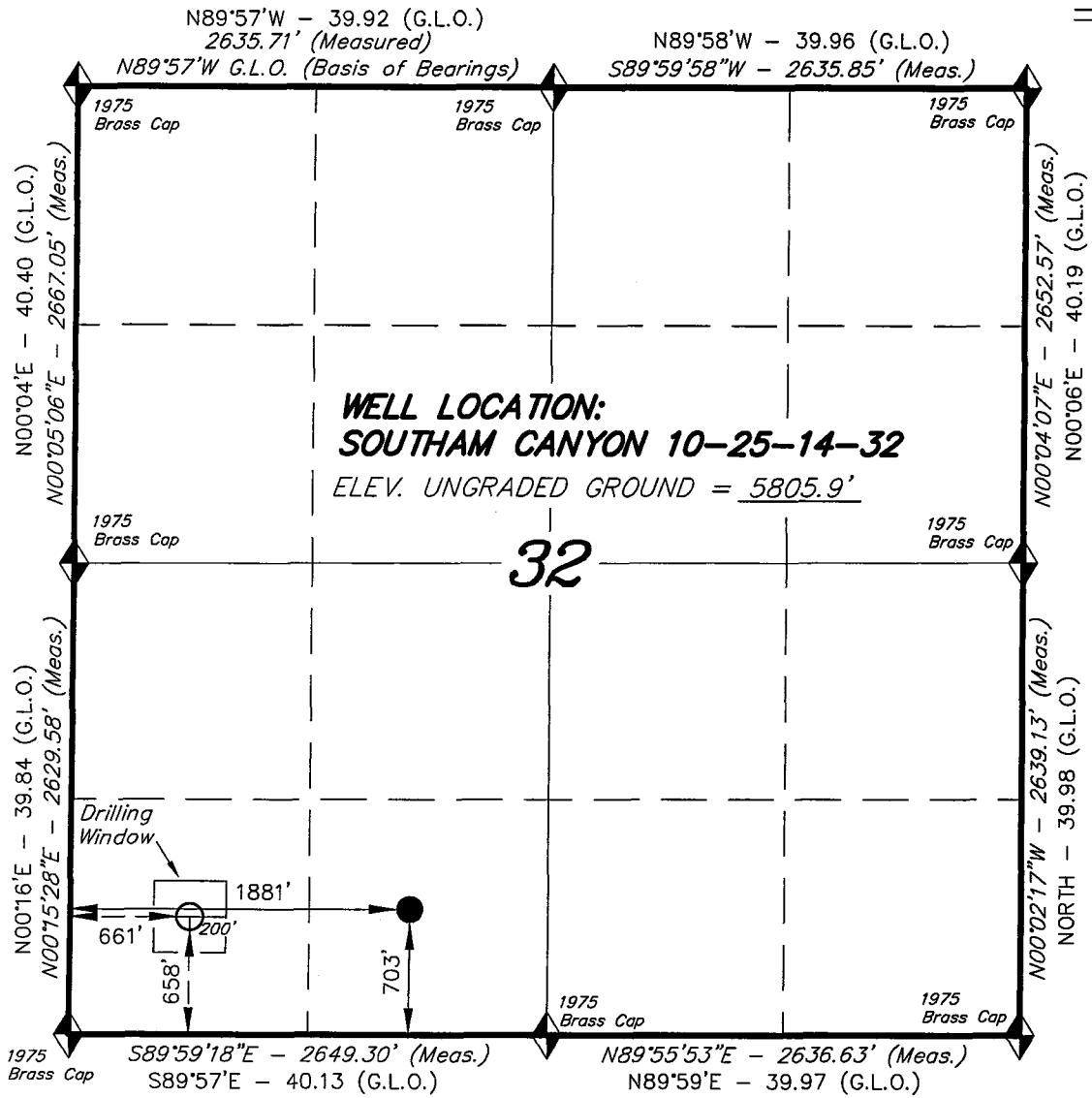
Approved by the Utah Division of Oil, Gas and Mining
APPROVAL:

Date: 09-21-06
(See Instructions on Reverse Side)
By:

RECEIVED
JUL 20 2006
DIV. OF OIL, GAS & MINING

(11/2001)

T10S, R25E, S.L.B.&M.



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (SOUTHAM CANYON)

SOUTHAM CANYON 10-25-14-32
(Surface Location) NAD 83
LATITUDE = 39° 54' 00.41"
LONGITUDE = 109° 07' 39.61"

ENDURING RESOURCES

WELL LOCATION, TOP OF HOLE FOR THE SOUTHAM CANYON 10-25-14-32, THE TOP OF HOLE LOCATED AS SHOWN IN THE SE 1/4 SW 1/4, THE BOTTOM HOLE LOCATED AS SHOWN IN THE SW 1/4 SW 1/4 OF SECTION 32, T10S, R25E, S.L.B.&M. UINTAH COUNTY, UTAH.

N

NOTES:

1. The Bottom of hole bears S87°55'12"W 1221.13' from the Top of Hole.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. No.189377

REGISTERED LAND SURVEYOR
STACY W. STEWART
REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

REGISTERED LAND SURVEYOR
STATE OF UTAH

TRI STATE LAND SURVEYING & CONSULTING
180 NORTH VERNAL AVE. – VERNAL, UTAH 84078
(435) 781-2501

DATE DRAWN: 10-27-05	SURVEYED BY: J.H.	SHEET 2b OF 10
REVISED:	DRAWN BY: F.T.M.	
NOTES:	SCALE: 1" = 1000'	

ENDURING RESOURCES, LLC
425 Seventeenth Street, Suite 1500
Denver, Colorado 80202
Telephone: 303-573-1222
Facsimile: 303-573-0461

July 12, 2006

State of Utah
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, Utah 84114-5801
Attention: Ms. Diana Whitney

RE: Exception Locations – Directional Drilled Well

Southam Canyon 10-25-14-32
703' FSL – 1881' FWL SE-SW 32-10S-25E (Surface Location)
658' FSL – 661' FWL SW-SW 32-10S-25E (BHL)
State Lease: ML-47065
Uintah County, Utah

Dear Ms. Whitney:

Enduring Resources, LLC respectfully requests a spacing exception for the following wells. Surface locations will be 25', more or less apart. BHL's for each well will be in its own "assigned" 40-acre, drilling window. No BHL's will be within 960' of each other. All of the wells, on this pad are being drilled directional to limit surface impact and to avoid drilling on steep slopes.

Enduring Resources, LLC is the only lease owner within a 460' radius of any point of any of the well bores, the surface locations, and the BHL's, to be drilled from this pad.

Therefore, Enduring Resources, LLC hereby grants itself permission to directionally drill the wells and the exception well locations.

Very truly yours

ENDURING RESOURCES, LLC

Alvin R. (Al) Arlian
Landman – Regulatory Specialist

ara/

Enduring Resources, LLC
Southam Canyon 10-25-14-32
SE-SW 32-10S-25E (Surface Location)
SW-SW 32-10S-25E (BHL)
Uintah County, Utah
State Lease: ML-47065

ONSHORE ORDER 1 - DRILLING PLAN

1. Estimated Tops of Geological Markers:

Formation	Depth (K.B.)
Uinta	Surface
Green River	-0-
Wasatch	2213
Mesaverde	3346

2. Estimated Depths of Anticipated Water, Oil, Gas or Other Minerals:

Substance	Formation	Depth (K.B.)
	KB-Uinta Elevation: 5818'	
Oil / Gas	Green River	-0-
Oil /Gas	Wasatch	2213
Oil /Gas	Mesaverde	3346
	Estimated TD	4310

A 11" hole will be drilled to approximately 2000 feet. The depth will be determined by the depth that the Birds Nest zone is encountered. The hole will be drilled 400 feet beyond the top of the Birds Nest zone and surface casing will be set.

3. Pressure Control Equipment: (3000 psi schematic attached)

A. Type: Eleven (11) inch double gate hydraulic BOP with eleven (11) inch annular preventer on 3,000 psi casinghead, with 3,000 psi choke manifold equipped per the attached diagram. BOPE as specified in *Onshore Oil & Gas Order Number 2.* A PVT, stroke counter and flow sensor will be installed to check for flow and monitor pit volume.

B. Pressure Rating: 3,000 psi BOPE

C. Kelly will be equipped with upper and lower Kelly valves.

D. Testing Procedure: Annular Preventer

At a minimum, the annular preventer will be pressure tested to 50% of the stack rated working pressure for a period of ten (10) minutes or until provisions of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the annular preventer is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the annular preventer will be functionally operated at least weekly.

Blow-Out Preventer

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the surface casing by a test plug) or to 70% of the internal yield strength of the surface casing (if the BOP is not isolated from the casing by a test plug). Pressure will be maintained for a period of at least ten (10) minutes or until the requirements of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the BOP is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the pipe and blind rams will be activated each trip, but not more than once each day. All BOP drills and tests will be recorded in the IADC driller's log.

E. Miscellaneous Information:

The blowout preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of *Onshore Oil & Gas Order Number 2.*

4. Proposed Casing & Cementing Program:

A. Casing Program: All New

Hole Size	Casing Size	Wt./Ft.	Grade	Joint	Depth Set (MD)
20"	14" O.D.				40' (GL)
11"	8-5/8"	24#	J-55	ST&C	0 – 2,016' (KB) est.
7-7/8"	4-1/2"	11.6#	N-80	LT&C	0 – 4310' (KB) 5503

The surface casing will have guide shoe, 1 joint, insert float collar. Centralize the shoe joint with bowspring centralizers in the middle and top of the joint and the next16 joints with bowspring centralizers on every other collar (8 centralizers total). Thread lock guide shoe.

Casing string(s) will be pressure tested to 0.22 psi/foot of casing string length or 1500 psi, whichever is greater (not to exceed 70% of the internal yield strength of the casing), after cementing and prior to drilling out from under the casing shoe.

B. Casing Design Parameters:

Depth (MD)	Casing	Collapse(psi)/SF	Burst (psi)/SF	Tension(mlbs)/SF
40' (GL)	14" OD			
2016' (KB)	8-5/8", 24#/ft, J55, STC	1370/1.52(a)	2950/3.28(b)	244/5.81(c)
4310' (KB)	4-1/2", 11.6#/ft, N-80, LTC	6350/2.84 (d)	7780/3.78 (e)	223/5.19(f)

(a.) based on full evacuation of pipe with 8.6 ppg fluid on annulus
(b.) based on 8.6 ppg gradient with no fluid on annulus
(c.) based on casing string weight in 8.6 ppg mud
(d.) based on full evacuation of pipe with 10.0 ppg fluid on annulus
(e.) based on 9.2 ppg gradient, gas to surface, with no fluid on annulus, no gas gradient
(f.) based on casing string weight in 9.2 ppg mud

PROPOSED CEMENTING PROGRAM

Surface Casing (if well will circulate)-Cemented to surface

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
8-5/8"	Lead	1516	Premium cement + 16% gel + 0.25 pps celloflake	138	25%	11.1	3.50
8-5/8"	Tail	500	Premium cement + 2% CaC_2 + 0.25 pps celloflake	138	25%	15.8	1.15

A cement top job is required if cement fallback is greater than 10' below ground level. Top job (weight 15.8 ppg, yield 1.15 ft^3/sx) cement will be premium cement w/ 3% $CaCl_2$.+0.25 pps celloflake. Volume as required

Surface Casing (if well will not circulate) - Cemented to surface

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
8-5/8"	Lead	500	Premium cement + 2% $CaCl_2$ + 0.25 pps celloflake	138	25	15.8	1.15
8-5/8"	Top job	As req.	Premium cement + 3% $CaCl_2$ + 0.25 pps celloflake	As Req.		15.8	1.15

Production Casing and Liner - Cemented TD to 300' above base of surface casing

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
4-1/2"	Lead	97	Class "G" + 5% NaCl + 12% Gel + 0.25 pps celloflake + 0.2% antifoam + 0.25% fluid loss + 1% extender	11	25	11.0	3.3
4-1/2"	Tail	2497	50/50 POZ Class G + 2% gel +1% $CaCl_2$ + 0.2% dispersant + 0.2% fluid loss + 0.1% antifoam	456	25	14.3	1.56

Cement volumes for the 4-1/2" Production Casing will be calculated to provide a top of cement to 300' above base of surface casing. Cement volumes are approximate and were calculated under the assumption that a gauge hole will be achieved. Actual cement volumes may vary due to variations in the actual hole size and will be determined by running a caliper log on the drilled hole. Actual cement types may vary due to hole conditions and cement contractor used.

All waiting on cement (WOC) times will be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

5. Drilling Fluids (mud) Program:

Interval (MD)	Mud Weight	Fluid Loss	Viscosity	Mud Type
0' – 2016' (KB)		No cntrl		Air/mist
2000'-3000' (KB)	8.4-8.6	No cntrl	28-36	Water
3000'-4310' (KB)	8.8-9.8	8 - 10 ml	32-42	Water/Gel

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blowout will be available at the well site during drilling operations.

6. Evaluation Program:

Tests: No tests are currently planned.

Coring: No cores are currently planned.

Samples: No sampling is currently planned.

Logging

- Dual Induction – SFL /Gamma Ray/Caliper/SP/TDLT/CNL/ML
  TD to Base Surface Casing
- Cement Bond Log / Gamma Ray:
  TD to Base of Surface Casing or Top of Cement if below Base of Surface Casing

Stimulation: A stimulation or frac treatment will be designed for completion of this well based on openhole log analysis. The drill site, as approved, will be sufficient size to accommodate all completion activities.

7. Abnormal Conditions:

No abnormal temperatures or pressures are anticipated. No H_2S has been encountered or known to exist from previous wells drilled to similar depths in the general area.

Maximum anticipated bottom hole pressure equals approximately 2,241 psi (calculated at 0.52psi/foot of hole) and maximum anticipated surface pressure equals approximately 1,293 psi (anticipated bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot of hole).

8. Anticipated Starting Dates:

- Anticipated Commencement Date- Within one year of APD issue.
- Drilling Days- Approximately 10 days
- Completion Days - Approximately 10 days
- Anticipate location construction within 30 days of permit issue.

9. Variances:

None anticipated

10. Other:

A Cultural Resource Inventory and Paleontology reconnaissance shall be conducted for the well location, access route and pipeline. The reports shall be submitted to the Division of Oil, Gas and Mining and the School and Institutional Trust lands Administration upon their receipt.

Single Shot directional surveys will be dropped every 2000 feet to monitor hole angle.

Directions to the Well Pad for:
Southam Canyon 10-25-24-32
Southam Canyon 10-25-14-32

Pad Location: SESW of Sec. 32, T10S, R25E, S.L.B.&M.

Beginning at the city of Bonanza, Utah. Leave the city of Bonanza traveling south on U.S. Highway 45, which becomes a paved road, for a distance of approximately 3.7 miles where the road turns left at a gaging station. Do not turn left. Continue southeasterly on the same road for a distance of 5.9 miles, where there is a fork in the road. Turn left, and proceed for a distance of approximately 1.2 miles. Turn right and continue westerly approximately 0.2 miles to the beginning of the proposed access. Thence proceed southwesterly for approximately 6,795 feet (1.3 miles) along the proposed access to the proposed well pad.

Enduring Resources, LLC

Southam Canyon 10-25-14-32
SW- SW-32- 10S-25E
Uintah County, Utah
State Lease: ML-47065

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. Existing Roads:

Beginning at the city of Bonanza, Utah leave the city of Bonanza heading south on U.S. highway 45, which becomes a paved road, for a distance of approximately 3.7 miles where the turns left at a gaging station. Do not turn left. Continue on southeasterly on the same road for a distance of approximately 5.9 miles, where there is a fork in the road. Turn left and proceed for a distance of approximately 1.2 miles. Turn right and bear westerly approximately 0.2 miles to the beginning of the proposed access. Thence proceed southwesterly for approximately 6,795 feet (1.3 miles) along the proposed access to the proposed Southam Canyon 10-25-24-32 well pad.

2. Planned Access Roads:

The proposed access road will be approximately 6,675 feet of new construction on-lease, and 120' off – lease.

ALL NEW CONSTRUCTION IS ON SITLA AND BLM LANDS.

The proposed access road will be utilized to transport personnel, equipment and supplies to and from the proposed well site during drilling, completion and production operations. The road will be utilized year round.

The access road will be crowned 2% to 3%, ditched and constructed with a running surface of 18 feet and a maximum disturbed width of 30 feet right-of-way. Maximum grade of road is 5% or less. Graveling or capping the roadbed will be performed as necessary to provided a well constructed, safe road. No fence crossings, culverts, turnouts, cattle guards or major cuts and fills are required. Prior to construction or upgrading, the proposed road shall be cleared of any snow and allowed to dry completely.

Surface disturbance and vehicular traffic will be limited to the proposed location and proposed access route. Any additional area needed will be approved in advance. All construction shall be in conformance with the standards outlined in the BLM and Forest Service publication: *Surface Operating Standards for Oil and Gas Exploration and Development. 1989.*

The road surface and shoulders will be kept in a safe usable condition and will be maintained in accordance with the original construction standards. All drainage ditches will be kept clear and free flowing and will be maintained according to original construction standards. The access road surface will be kept free of trash during operations. All traffic will be confined to the approved disturbed surface. Road drainage crossings shall be designed so they will not cause siltation or accumulation of

debris in the drainage crossing nor shall the drainages be blocked by the road bed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided. When snow is removed from the road during the winter months, the snow shall be pushed outside of the borrow ditches and the turnouts kept clear so that snowmelt will be channeled away from the road.

3. Location of Existing Wells within a One-Mile radius (See "Topo" Map "C" attached):

The following wells are wells located within a one (1) mile or greater radius of the proposed location.

a.	None:	Water Wells:
b.	None:	Injection Wells:
c.	None:	Producing Wells:
d.	None:	Drilling Wells:
e.	None:	Shut-in Wells:
f.	None:	Temporarily Abandoned Wells:
g.	None:	Disposal Wells:
h.	None:	Abandoned Wells:
i.	None:	Dry Holes:
j.	None:	Observation Wells:
k.	(9):	Pending (staked) Wells:

i. Enduring has nine other wells staked in this section.

4. Location of Existing and/or Proposed Facilities:

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e. production tanks, produced water tanks and/or heater treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank and be independent of the back cut.

All permanent (on site for six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Inter-Agency Committee

All facilities will be painted within 6 months of installation. The color shall be designated by DOG&M and SITLA. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Gas Gathering Pipeline for this well will be:

710'	Surface Pipeline	On-Lease	SITLA
-0-	Surface Pipeline	Off-Lease	n/a

If this well is capable of economic production, a 4" (or less) steel surface gas gathering line and related equipment shall be installed. The surface gas gathering line shall be in use year round. A total of approximately less than 710 feet of surface gas gathering pipeline shall be laid on the surface to minimize surface disturbance:

The proposed pipeline will begin at the well site; and be laid on the surface next to the new access road to tie-in to a steel surface pipeline that is located next to the county road.

The meter run will be housed. The gas gathering line will be buried or anchored down from the wellhead to the meter.

Upon plugging and abandonment, the gas gathering line will be removed and the disturbed area will be re-contoured and restored as near as practical to the original condition. If necessary, re-seeding operations will be performed after completion of other reclamation operations.

5. Location and Type of Water Supply:

Water will be purchased from American Gilsonite from the following source. Water Right No. 49-222, Application/Claim No. A29909/a4958, Certificate No. 9915 ("AGC Water Right"). The AGC Water Right consists of nineteen underground water wells located in Sec.2, T10S, R24E, SLBM, piped to and stored in a cistern located in Section 25, T9S, R24E.

Water will be hauled to the location over the roads marked on "Topo" Maps "A" and "B."

No water well is to be drilled on this lease.

6 Source of Construction Materials:

Surface and subsoil materials in the immediate area will be utilized for location and access road construction.

Any gravel will be obtained from a commercial source; however, gravel sized rock debris associated with location and access road construction may be used as access road surfacing material.

7. Methods of Handling Waste Materials:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit will be

removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exits or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, brake or allow discharge of liquids.

The reserve pit will be lined with ¼ felt and a minimum of 16 mm plastic with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the will be disposed of in the pit.

A chemical portable toilet will be furnished with the drilling rig. The toilet will be replaced periodically utilizing a licensed contractor to transport by truck the portable chemical toilet so that its contents can be delivered to the Vernal Wastewater Treatment Facility in accordance with state and county regulations.

Garbage, trash and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash well is burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported or disposed of in association with the drilling, completion or testing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported or disposed of in association with the drilling, completion or testing of this well.

Produced oil will be stored in an oil tank and then hauled by truck to a crude purchaser facility. Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to an approved disposal site.

8. Ancillary Facilities:

During drilling operations, approximately 20 days, the site will be a manned camp. Three or four additional trailers will be on location to serve as the crews' housing and eating facilities. These will be located on the perimeter of the pad site within the topsoil stockpiles. Refer to Sheet 4.

9. Well Site Layout: (Refer to Sheets #2, #3, and #4)

The attached Location Layout Diagrams described drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s) and surface material stockpiles(s).

Please see the attached diagram for rig orientation and access roads.

The top soil will be windrowed rather than piled. It will be reseeded and track walker at the time the location is constructed. Seeding will be with the determined during the onsite. (Refer to "Seed Mixture for Windrowed Top Soil Will included:" following herein.

The top soil removed from the pit area will be stored separately and will not be reseeded until the pit is reclaimed.

All pits shall be fence to the following minimum standards:

a. 39 inch net wire shall be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
b. The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches over the new wire. Total height of the fence shall be at least 42 inches.
c. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
d. Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two fence posts shall be no greater than 16 feet.
e. All wire shall be stretched by, using a stretching device, before it is attached to corner posts.
f. The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.
g. Location size may change prior to drilling the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling, the location will be re-surveyed and a Form 9 will be submitted.

10. Plans for Surface Reclamation:

Producing Location:

a. Immediately upon well completion the location and surrounding area will be cleared of all unused tubing, equipment, materials, trash and debris not required for production.
b. Immediately upon well completion any hydrocarbons in the pit shall be removed in accordance with 40CFR 3162.7.
c. Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

d. The reserve pit and that portion of the location not needed for production facilities/operations will be re-contoured to the approximated natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.
e. To prevent surface water(s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface 3 feet above surrounding round surface to allow the reclaimed pit area to drain effectively.
f. Upon completion of back filling, leveling and re-contouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

Dry Hole/Abandoned Location:

i. Abandoned well sites, roads and other disturbed areas will be restored as nearly as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions and re-establishment of vegetation as specified.
ii. All disturbed surfaces will be re-contoured to the approximated natural contours with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. If necessary, re-seeding operations will be performed after completion of other reclamation operations.

Seed Mixture for Windrowed Top Soil Will Included:

To be provided by the DOG&M and/or SITLA.

11. Surface Ownership: Location, Access and Pipeline Route:

Wellsite: SITLA

Access: SITLA & BLM

Pipeline: SITLA

12. Other Information

On-site Inspection for Location, Access and Pipeline Route:

The on-site will be scheduled by SITLA and DOG&M.

Special Conditions of Approval:

- Tanks and Production Equipment shall be painted pursuant of SITLA and DOG&M request.
- Surface Gathering Pipeline shall be 4" or less

Archeology:

a. A Cultural Resource Inventory Report is pending and to be prepared by Montgomery Archaeological Consultants.

Paleontology:

a. A Paleontology Reconnaissance Report is pending and to be prepared by Intermountain Paleo-Consulting.

If, during operations, any archaeological or historical sites, or any objects of antiquity (subject to the Antiquities Act of June 8, 1906) are discovered, all operations which would affect such sites will be suspended and the discovery reported promptly to the surface management agency.

13, Lessee's or Operator's Representatives:

Representatives:

Alvin R. (Al) Arlian
Landman – Regulatory Specialist
Enduring Resources, LLC
475 17th Street, Suite 1500
Denver, Colorado 80202
Office Tel: 303-350-5114
Fax Tel: 303-573-0461
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Teme Singleton
Drilling Engineer
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Denver, Colorado 80202
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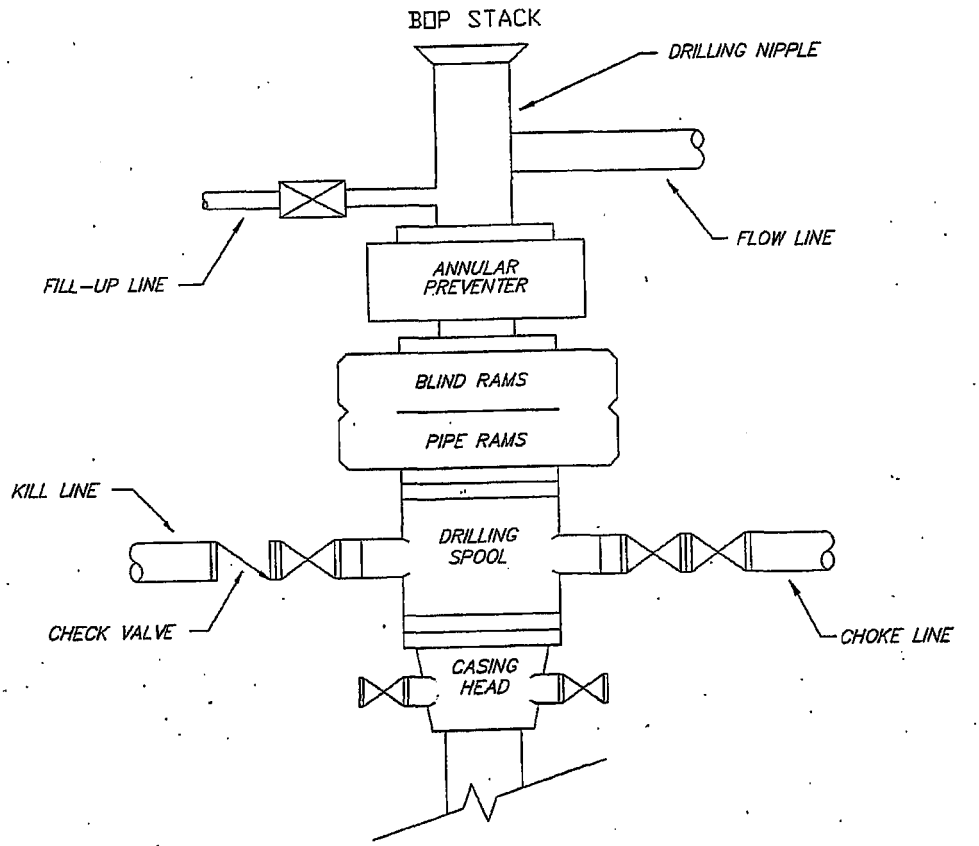
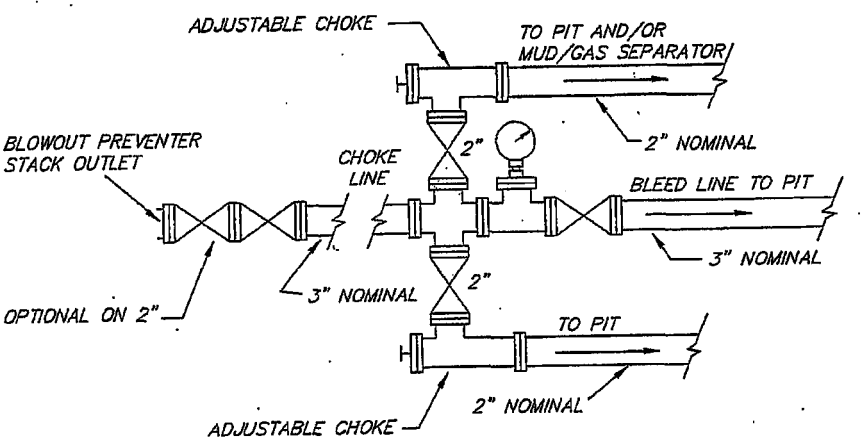
tsingleton@enduringresources.com

ENDURING RESOURCES, LLC

TYPICAL 3,000 p.s.i.
BLOWOUT PREVENTER SCHEMATIC



TYPICAL 3,000 p.s.i.
CHOKE MANIFOLD SCHEMATIC



ENDURING RESOURCES
Southam Canyon 10-25-14-32
SE/SW Sec. 32, T10S, R25E
Uintah County, Utah

Weatherford

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	268.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	500.00	0.00	268.00	500.00	0.00	0.00	0.00	268.00	0.00	Start Nudge
3	1000.00	15.00	268.00	994.31	-2.27	-65.04	3.00	268.00	65.08	End Nudge
4	1600.00	15.00	268.00	1573.86	-7.69	-220.23	0.00	0.00	220.37	Start Build
5	2240.88	47.04	268.00	2115.95	-19.07	-546.04	5.00	0.00	546.37	End Build
6	2542.76	47.04	268.00	2321.66	-26.78	-766.84	0.00	0.00	767.31	Start Drop
7	3718.86	0.00	268.00	3370.00	-42.70	-1222.87	4.00	180.00	1223.62	End Drop
8	5503.86	0.00	268.00	5155.00	-42.70	-1222.87	0.00	268.00	1223.62	TD

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Southam Canyon 10-25-14-32	0.00	0.00	7141180.33	2305883.02	39°54'00.410N	109°07'39.610W	N/A

RKB Elevation: 5819.0

Ground Elevation: 5802.9

FIELD DETAILS

Uintah, Utah
Utah Central Zone
U.S.A.

Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: Utah, Central Zone
Magnetic Model: igrf2005

System Datum: Mean Sea Level
Local North: True North

SITE DETAILS

SE/SW 32-10S-25E
Sec. 32, T10S, R25E, Uintah County, Utah
703 FSL & 1881 FWL

Site Centre Latitude: 39°54'00.410N
Longitude: 109°07'39.610W

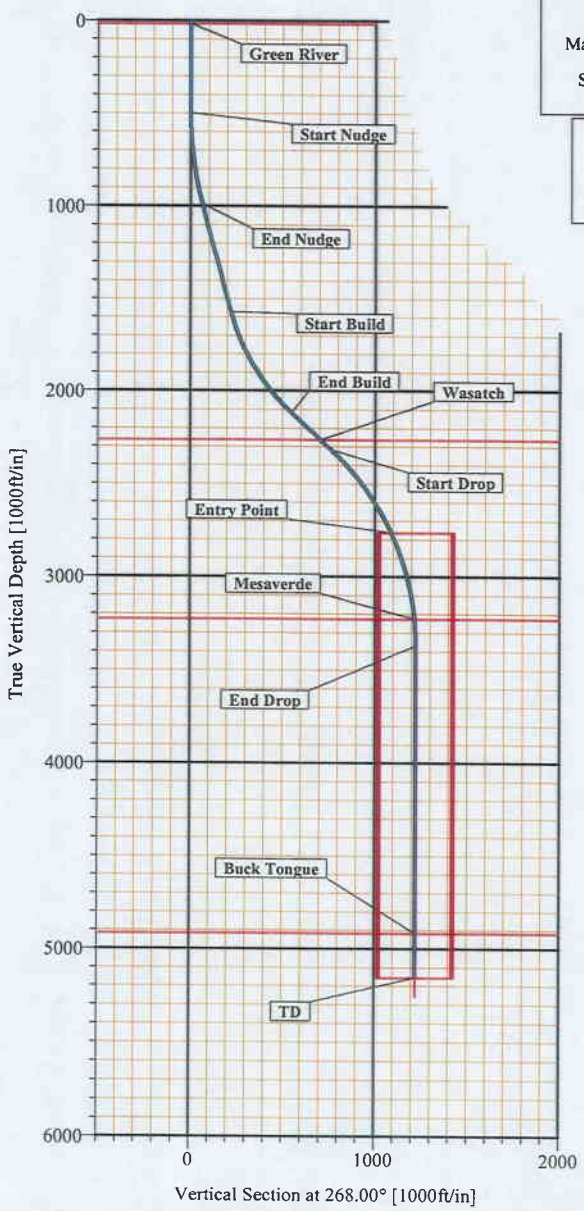
Ground Level: 5802.90
Positional Uncertainty: 0.00
Convergence: 1.52

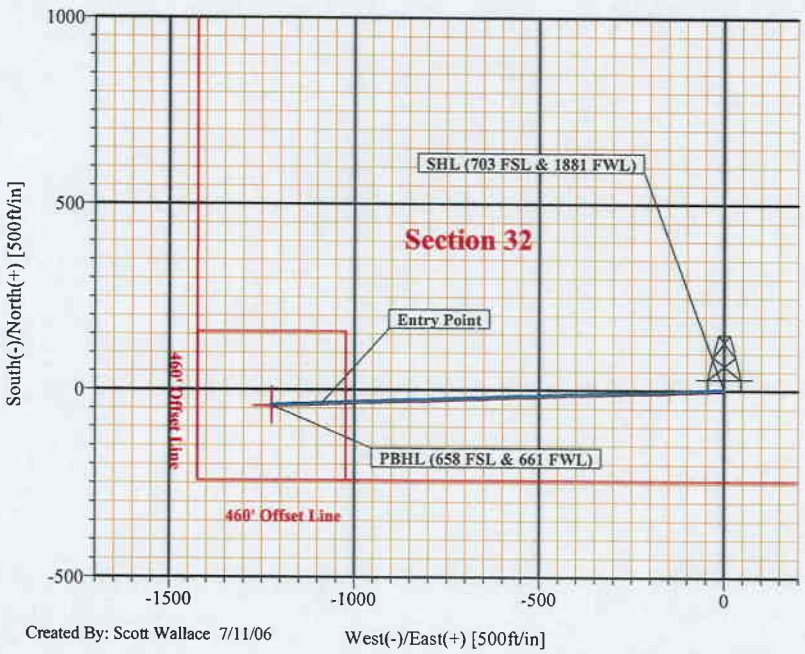
TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
10-25-14-32 Target	5155.00	-42.70	-1222.87	Rectangle (400x400)

FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	17.00	17.00	Green River
2	2264.00	2458.14	Wasatch
3	3227.00	3575.63	Mesaverde
4	4916.00	5264.86	Buck Tongue





Created By: Scott Wallace 7/11/06

Weatherford International
Planning Report

Company:	Enduring Resources	**Date:** 7/11/2006	**Time:** 15:14:15	**Page:**	1
Field:	Uintah, Utah	**Co-ordinate(NE) Reference:**	Well: Southam Canyon 10-25-14-32		
Site:	SE/SW 32-10S-25E	**Vertical (TVD) Reference:**	SITE 5819.0		
Well:	Southam Canyon 10-25-14-32	**Section (VS) Reference:**	Well (0.00N,0.00E,268.00Azi)		
Wellpath:	1	**Plan:**	Plan #1		

Field:	Uintah, Utah Utah Central Zone U.S.A.		
Map System:	US State Plane Coordinate System 1983	**Map Zone:**	Utah, Central Zone
Geo Datum:	GRS 1980	**Coordinate System:**	Well Centre
Sys Datum:	Mean Sea Level	**Geomagnetic Model:**	igrf2005

Site:	SE/SW 32-10S-25E Sec. 32, T10S, R25E, Uintah County, Utah 703 FSL & 1881 FWL				
Site Position:		**Northing:**	7141180.33 ft	**Latitude:**	39 54 0.410 N
From:	Geographic	**Easting:**	2305883.02 ft	**Longitude:**	109 7 39.610 W
Position Uncertainty:	0.00 ft			**North Reference:**	True
Ground Level:	5802.90 ft			**Grid Convergence:**	1.52 deg

Well:	Southam Canyon 10-25-14-32				**Slot Name:**	
Well Position:	**+N/-S**	0.00 ft	**Northing:**	7141180.33 ft	**Latitude:**	39 54 0.410 N
	+E/-W	0.00 ft	**Easting:**	2305883.02 ft	**Longitude:**	109 7 39.610 W
Position Uncertainty:		0.00 ft				

Wellpath:	1			**Drilled From:**	Surface
				Tie-on Depth:	0.00 ft
Current Datum:	SITE	**Height**	5819.00 ft	**Above System Datum:**	Mean Sea Level
Magnetic Data:	7/10/2006			**Declination:**	11.53 deg
Field Strength:	52876 nT			**Mag Dip Angle:**	65.99 deg

Vertical Section:	**Depth From (TVD)** ft	**+N/-S** ft	**+E/-W** ft	**Direction** deg
	0.00	0.00	0.00	268.00

Plan:	Plan #1	**Date Composed:**	7/10/2006
		Version:	1
Principal:	Yes	**Tied-to:**	From Surface

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	268.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	268.00	500.00	0.00	0.00	0.00	0.00	0.00	268.00	
1000.00	15.00	268.00	994.31	-2.27	-65.04	3.00	3.00	0.00	268.00	
1600.00	15.00	268.00	1573.86	-7.69	-220.23	0.00	0.00	0.00	0.00	
2240.88	47.04	268.00	2115.95	-19.07	-546.04	5.00	5.00	0.00	0.00	
2542.76	47.04	268.00	2321.66	-26.78	-766.84	0.00	0.00	0.00	0.00	
3718.86	0.00	268.00	3370.00	-42.70	-1222.87	4.00	-4.00	0.00	180.00	
5503.86	0.00	268.00	5155.00	-42.70	-1222.87	0.00	0.00	0.00	268.00	10-25-14-32 Target

Section 1 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
0.00	0.00	268.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50.00	0.00	268.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	268.00
150.00	0.00	268.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00	268.00
250.00	0.00	268.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	268.00
350.00	0.00	268.00	350.00	0.00	0.00	0.00	0.00	0.00	0.00	268.00
450.00	0.00	268.00	450.00	0.00	0.00	0.00	0.00	0.00	0.00	268.00
500.00	0.00	268.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	268.00

Section 2 : Start Build 3.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
550.00	1.50	268.00	549.99	-0.02	-0.65	0.65	3.00	3.00	0.00	0.00
650.00	4.50	268.00	649.85	-0.21	-5.88	5.89	3.00	3.00	0.00	0.00
750.00	7.50	268.00	749.29	-0.57	-16.33	16.34	3.00	3.00	0.00	0.00
850.00	10.50	268.00	848.04	-1.12	-31.96	31.98	3.00	3.00	0.00	0.00

Weatherford International
Planning Report

Company:	Enduring Resources	**Date:** 7/11/2006	**Time:** 15:14:15	**Page:**	2
Field:	Uintah, Utah	**Co-ordinate(NE) Reference:**	Well: Southam Canyon 10-25-14-32		
Site:	SE/SW 32-10S-25E	**Vertical (TVD) Reference:**	SITE 5819.0		
Well:	Southam Canyon 10-25-14-32	**Section (VS) Reference:**	Well (0.00N,0.00E,268.00Azi)		
Wellpath:	1	**Plan:**	Plan #1		

Section 2 : Start Build 3.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
950.00	13.50	268.00	945.85	-1.84	-52.74	52.77	3.00	3.00	0.00	0.00
1000.00	15.00	268.00	994.31	-2.27	-65.04	65.08	3.00	3.00	0.00	0.00

Section 3 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
1050.00	15.00	268.00	1042.60	-2.72	-77.97	78.02	0.00	0.00	0.00	0.00
1150.00	15.00	268.00	1139.20	-3.63	-103.84	103.90	0.00	0.00	0.00	0.00
1250.00	15.00	268.00	1235.79	-4.53	-129.70	129.78	0.00	0.00	0.00	0.00
1350.00	15.00	268.00	1332.38	-5.43	-155.57	155.66	0.00	0.00	0.00	0.00
1450.00	15.00	268.00	1428.97	-6.34	-181.43	181.55	0.00	0.00	0.00	0.00
1550.00	15.00	268.00	1525.57	-7.24	-207.30	207.43	0.00	0.00	0.00	0.00
1600.00	15.00	268.00	1573.86	-7.69	-220.23	220.37	0.00	0.00	0.00	0.00

Section 4 : Start Build 5.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
1650.00	17.50	268.00	1621.86	-8.18	-234.22	234.36	5.00	5.00	0.00	0.00
1750.00	22.50	268.00	1715.80	-9.37	-268.39	268.55	5.00	5.00	0.00	0.00
1850.00	27.50	268.00	1806.40	-10.85	-310.61	310.80	5.00	5.00	0.00	0.00
1950.00	32.50	268.00	1892.98	-12.59	-360.56	360.78	5.00	5.00	0.00	0.00
2050.00	37.50	268.00	1974.87	-14.59	-417.87	418.12	5.00	5.00	0.00	0.00
2150.00	42.50	268.00	2051.45	-16.83	-482.09	482.38	5.00	5.00	0.00	0.00
2240.88	47.04	268.00	2115.95	-19.07	-546.04	546.37	5.00	5.00	0.00	0.00

Section 5 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
2250.00	47.04	268.00	2122.16	-19.30	-552.71	553.04	0.00	0.00	0.00	0.00
2350.00	47.04	268.00	2190.31	-21.86	-625.85	626.23	0.00	0.00	0.00	0.00
2450.00	47.04	268.00	2258.45	-24.41	-698.99	699.42	0.00	0.00	0.00	0.00
2458.14	47.04	268.00	2264.00	-24.62	-704.95	705.38	0.00	0.00	0.00	0.00
2542.76	47.04	268.00	2321.66	-26.78	-766.84	767.31	0.00	0.00	0.00	0.00

Section 6 : Start Drop -4.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
2550.00	46.75	268.00	2326.61	-26.96	-772.12	772.59	4.00	-4.00	0.00	180.00
2650.00	42.75	268.00	2397.61	-29.42	-842.47	842.99	4.00	-4.00	0.00	180.00
2750.00	38.75	268.00	2473.34	-31.70	-907.70	908.26	4.00	-4.00	0.00	-180.00
2850.00	34.75	268.00	2553.45	-33.79	-967.49	968.08	4.00	-4.00	0.00	180.00
2950.00	30.75	268.00	2637.53	-35.67	-1021.55	1022.18	4.00	-4.00	0.00	-180.00
3050.00	26.75	268.00	2725.18	-37.35	-1069.62	1070.27	4.00	-4.00	0.00	180.00
3093.15	25.03	268.00	2764.00	-38.01	-1088.45	1089.12	4.00	-4.00	0.00	180.00
3150.00	22.75	268.00	2815.97	-38.81	-1111.46	1112.14	4.00	-4.00	0.00	-180.00
3250.00	18.75	268.00	2909.46	-40.05	-1146.87	1147.57	4.00	-4.00	0.00	180.00
3350.00	14.75	268.00	3005.20	-41.06	-1175.67	1176.39	4.00	-4.00	0.00	-180.00
3450.00	10.75	268.00	3102.71	-41.83	-1197.73	1198.46	4.00	-4.00	0.00	180.00
3550.00	6.75	268.00	3201.53	-42.36	-1212.94	1213.68	4.00	-4.00	0.00	180.00
3575.63	5.73	268.00	3227.00	-42.45	-1215.72	1216.46	4.00	-4.00	0.00	180.00
3650.00	2.75	268.00	3301.16	-42.65	-1221.22	1221.96	4.00	-4.00	0.00	-180.00
3718.86	0.00	268.00	3370.00	-42.70	-1222.87	1223.62	4.00	-4.00	0.00	-180.00

Section 7 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
3750.00	0.00	268.00	3401.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
3850.00	0.00	268.00	3501.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
3950.00	0.00	268.00	3601.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00

Weatherford International
Planning Report

Company:	Enduring Resources	**Date:** 7/11/2006	**Time:** 15:14:15	**Page:**	3
Field:	Uintah, Utah	**Co-ordinate(NE) Reference:**	Well: Southam Canyon 10-25-14-32		
Site:	SE/SW 32-10S-25E	**Vertical (TVD) Reference:**	SITE 5819.0		
Well:	Southam Canyon 10-25-14-32	**Section (VS) Reference:**	Well (0.00N,0.00E,268.00Azi)		
Wellpath:	1	**Plan:**	Plan #1		

Section 7 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
4050.00	0.00	268.00	3701.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
4150.00	0.00	268.00	3801.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
4250.00	0.00	268.00	3901.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
4350.00	0.00	268.00	4001.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
4450.00	0.00	268.00	4101.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
4550.00	0.00	268.00	4201.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
4650.00	0.00	268.00	4301.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
4750.00	0.00	268.00	4401.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
4850.00	0.00	268.00	4501.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
4950.00	0.00	268.00	4601.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
5050.00	0.00	268.00	4701.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
5150.00	0.00	268.00	4801.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
5250.00	0.00	268.00	4901.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
5264.86	0.00	268.00	4916.00	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
5350.00	0.00	268.00	5001.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
5450.00	0.00	268.00	5101.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00
5503.86	0.00	268.00	5155.00	-42.70	-1222.87	1223.62	0.00	0.00	0.00	268.00

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
50.00	0.00	268.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	MWD
150.00	0.00	268.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00	MWD
250.00	0.00	268.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	MWD
350.00	0.00	268.00	350.00	0.00	0.00	0.00	0.00	0.00	0.00	MWD
450.00	0.00	268.00	450.00	0.00	0.00	0.00	0.00	0.00	0.00	MWD
500.00	0.00	268.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Nudge
550.00	1.50	268.00	549.99	-0.02	-0.65	0.65	3.00	3.00	0.00	MWD
650.00	4.50	268.00	649.85	-0.21	-5.88	5.89	3.00	3.00	0.00	MWD
750.00	7.50	268.00	749.29	-0.57	-16.33	16.34	3.00	3.00	0.00	MWD
850.00	10.50	268.00	848.04	-1.12	-31.96	31.98	3.00	3.00	0.00	MWD
950.00	13.50	268.00	945.85	-1.84	-52.74	52.77	3.00	3.00	0.00	MWD
1000.00	15.00	268.00	994.31	-2.27	-65.04	65.08	3.00	3.00	0.00	End Nudge
1050.00	15.00	268.00	1042.60	-2.72	-77.97	78.02	0.00	0.00	0.00	MWD
1150.00	15.00	268.00	1139.20	-3.63	-103.84	103.90	0.00	0.00	0.00	MWD
1250.00	15.00	268.00	1235.79	-4.53	-129.70	129.78	0.00	0.00	0.00	MWD
1350.00	15.00	268.00	1332.38	-5.43	-155.57	155.66	0.00	0.00	0.00	MWD
1450.00	15.00	268.00	1428.97	-6.34	-181.43	181.55	0.00	0.00	0.00	MWD
1550.00	15.00	268.00	1525.57	-7.24	-207.30	207.43	0.00	0.00	0.00	MWD
1600.00	15.00	268.00	1573.86	-7.69	-220.23	220.37	0.00	0.00	0.00	Start Build
1650.00	17.50	268.00	1621.86	-8.18	-234.22	234.36	5.00	5.00	0.00	MWD
1750.00	22.50	268.00	1715.80	-9.37	-268.39	268.55	5.00	5.00	0.00	MWD
1850.00	27.50	268.00	1806.40	-10.85	-310.61	310.80	5.00	5.00	0.00	MWD
1950.00	32.50	268.00	1892.98	-12.59	-360.56	360.78	5.00	5.00	0.00	MWD
2050.00	37.50	268.00	1974.87	-14.59	-417.87	418.12	5.00	5.00	0.00	MWD
2150.00	42.50	268.00	2051.45	-16.83	-482.09	482.38	5.00	5.00	0.00	MWD
2240.88	47.04	268.00	2115.95	-19.07	-546.04	546.37	5.00	5.00	0.00	End Build
2250.00	47.04	268.00	2122.16	-19.30	-552.71	553.04	0.00	0.00	0.00	MWD
2350.00	47.04	268.00	2190.31	-21.86	-625.85	626.23	0.00	0.00	0.00	MWD
2450.00	47.04	268.00	2258.45	-24.41	-698.99	699.42	0.00	0.00	0.00	MWD
2458.14	47.04	268.00	2264.00	-24.62	-704.95	705.38	0.00	0.00	0.00	Wasatch
2542.76	47.04	268.00	2321.66	-26.78	-766.84	767.31	0.00	0.00	0.00	Start Drop
2550.00	46.75	268.00	2326.61	-26.96	-772.12	772.59	4.00	-4.00	0.00	MWD
2650.00	42.75	268.00	2397.61	-29.42	-842.47	842.99	4.00	-4.00	0.00	MWD
2750.00	38.75	268.00	2473.34	-31.70	-907.70	908.26	4.00	-4.00	0.00	MWD
2850.00	34.75	268.00	2553.45	-33.79	-967.49	968.08	4.00	-4.00	0.00	MWD

Weatherford International
Planning Report

Company:	Enduring Resources	**Date:** 7/11/2006	**Time:** 15:14:15	**Page:**	4
Field:	Uintah, Utah	**Co-ordinate(NE) Reference:**	Well: Southam Canyon 10-25-14-32		
Site:	SE/SW 32-10S-25E	**Vertical (TVD) Reference:**	SITE 5819.0		
Well:	Southam Canyon 10-25-14-32	**Section (VS) Reference:**	Well (0.00N,0.00E,268.00Azi)		
Wellpath:	1	**Plan:**	Plan #1		

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
2950.00	30.75	268.00	2637.53	-35.67	-1021.55	1022.18	4.00	-4.00	0.00	MWD
3050.00	26.75	268.00	2725.18	-37.35	-1069.62	1070.27	4.00	-4.00	0.00	MWD
3093.15	25.03	268.00	2764.00	-38.01	-1088.45	1089.12	4.00	-4.00	0.00	Entry Point
3150.00	22.75	268.00	2815.97	-38.81	-1111.46	1112.14	4.00	-4.00	0.00	MWD
3250.00	18.75	268.00	2909.46	-40.05	-1146.87	1147.57	4.00	-4.00	0.00	MWD
3350.00	14.75	268.00	3005.20	-41.06	-1175.67	1176.39	4.00	-4.00	0.00	MWD
3450.00	10.75	268.00	3102.71	-41.83	-1197.73	1198.46	4.00	-4.00	0.00	MWD
3550.00	6.75	268.00	3201.53	-42.36	-1212.94	1213.68	4.00	-4.00	0.00	MWD
3575.63	5.73	268.00	3227.00	-42.45	-1215.72	1216.46	4.00	-4.00	0.00	Mesaverde
3650.00	2.75	268.00	3301.16	-42.65	-1221.22	1221.96	4.00	-4.00	0.00	MWD
3718.86	0.00	268.00	3370.00	-42.70	-1222.87	1223.62	4.00	-4.00	0.00	End Drop
3750.00	0.00	268.00	3401.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
3850.00	0.00	268.00	3501.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
3950.00	0.00	268.00	3601.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
4050.00	0.00	268.00	3701.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
4150.00	0.00	268.00	3801.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
4250.00	0.00	268.00	3901.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
4350.00	0.00	268.00	4001.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
4450.00	0.00	268.00	4101.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
4550.00	0.00	268.00	4201.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
4650.00	0.00	268.00	4301.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
4750.00	0.00	268.00	4401.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
4850.00	0.00	268.00	4501.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
4950.00	0.00	268.00	4601.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
5050.00	0.00	268.00	4701.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
5150.00	0.00	268.00	4801.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
5250.00	0.00	268.00	4901.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
5264.86	0.00	268.00	4916.00	-42.70	-1222.87	1223.62	0.00	0.00	0.00	Buck Tongue
5350.00	0.00	268.00	5001.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
5450.00	0.00	268.00	5101.14	-42.70	-1222.87	1223.62	0.00	0.00	0.00	MWD
5503.86	0.00	268.00	5155.00	-42.70	-1222.87	1223.62	0.00	0.00	0.00	10-25-14-32 Target

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<— Latitude —> Deg Min Sec	<— Longitude —> Deg Min Sec
10-25-14-32 Target -Rectangle (400x400) -Plan hit target			5155.00	-42.70	-1222.87	7141105.21	2304661.71	39 53 59.988 N	109 7 55.302 W

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
17.00	17.00	Green River		0.00	0.00
2458.14	2264.00	Wasatch		0.00	0.00
3575.63	3227.00	Mesaverde		0.00	0.00
5264.86	4916.00	Buck Tongue		0.00	0.00

Annotation

MD ft	TVD ft	
		SHL (703 FSL & 1881 FWL)
500.00	500.00	Start Nudge
1000.00	994.31	End Nudge

Weatherford International
Planning Report

Company:	Enduring Resources	**Date:** 7/11/2006	**Time:** 15:14:15	**Page:**	5
Field:	Uintah, Utah	**Co-ordinate(NE) Reference:**	Well: Southam Canyon 10-25-14-32		
Site:	SE/SW 32-10S-25E	**Vertical (TVD) Reference:**	SITE 5819.0		
Well:	Southam Canyon 10-25-14-32	**Section (VS) Reference:**	Well (0.00N,0.00E,268.00Azi)		
Wellpath:	1	**Plan:**	Plan #1		

Annotation

MD ft	TVD ft	
1600.00	1573.86	Start Build
2240.88	2115.95	End Build
2542.76	2321.66	Start Drop
3093.15	2764.00	Entry Point
3718.86	3370.00	End Drop
5503.86	5155.00	TD
5503.86	5155.00	PBHL (658 FSL & 661 FWL)

ENDURING RESOURCES

WELL PAD INTERFERENCE PLAT
SOUTHAM CANYON 10-25-24-32
SOUTHAM CANYON 10-25-14-32
Section 32, T10S, R25E, S.L.B.&M.

TOP HOLE FOOTAGES

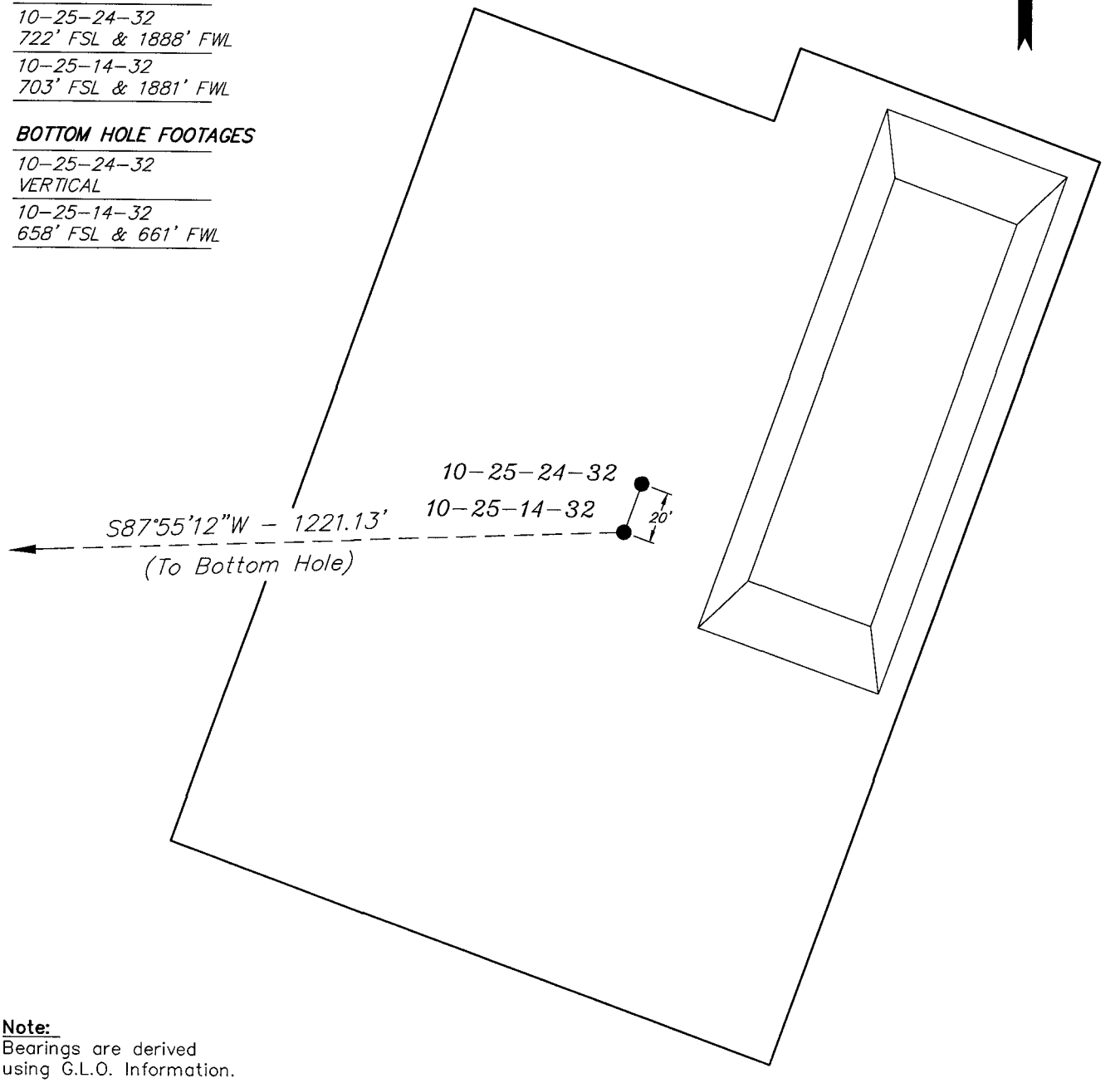
10-25-24-32
722' FSL & 1888' FWL

10-25-14-32
703' FSL & 1881' FWL

BOTTOM HOLE FOOTAGES

10-25-24-32
VERTICAL

10-25-14-32
658' FSL & 661' FWL



Note:
Bearings are derived using G.L.O. Information.

RELATIVE COORDINATES
From top hole to bottom hole

WELL	NORTH	EAST
24-32	N/A	N/A
14-32	-44'	-1,220'

LATITUDE & LONGITUDE
Surface position of Wells (NAD 83)

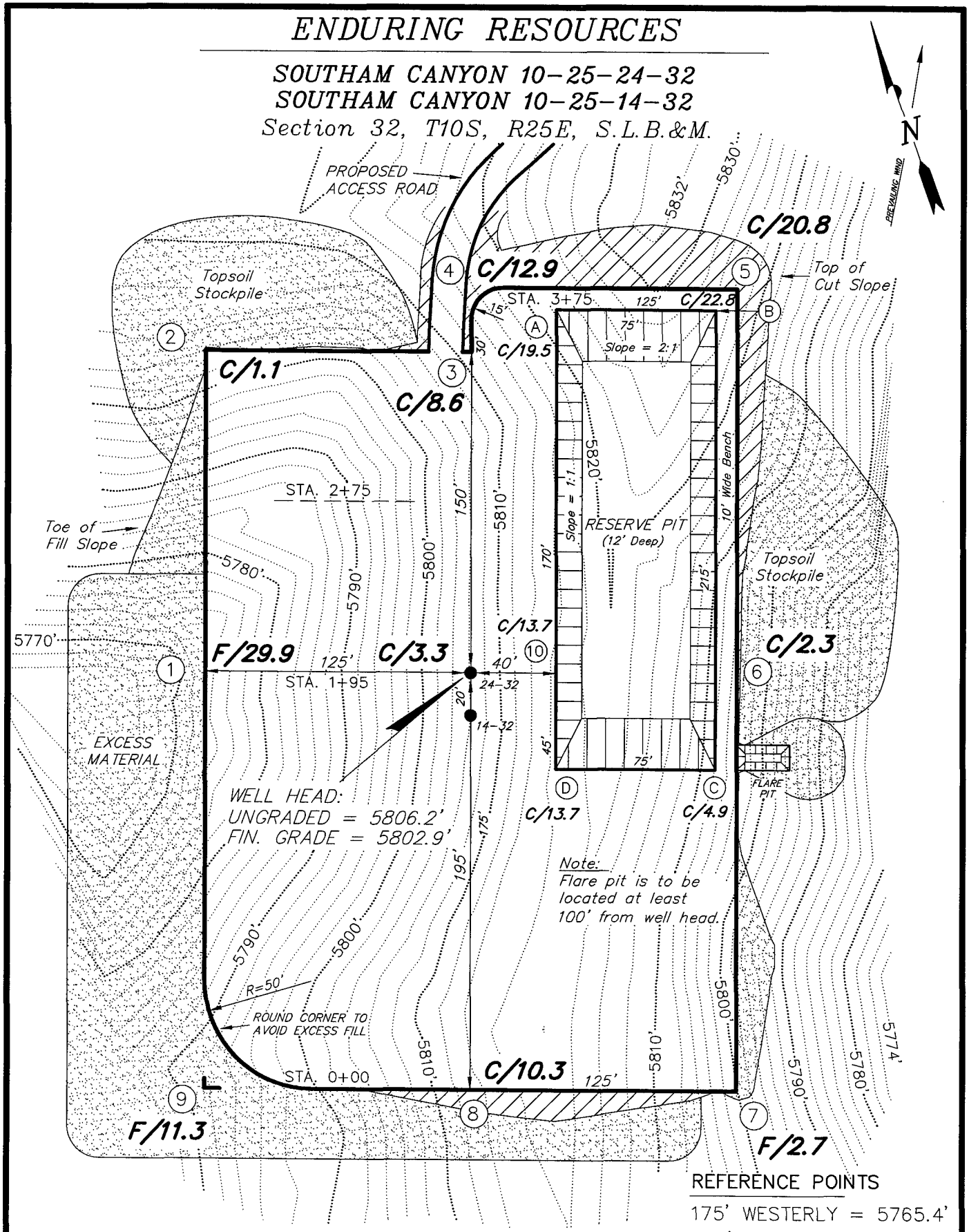
WELL	LATITUDE	LONGITUDE
24-32	39° 54' 00.60"	109° 07' 39.52"
14-32	39° 54' 00.41"	109° 07' 39.61"

SURVEYED BY:	J.H.	DATE DRAWN:	10-27-05
DRAWN BY:	F.T.M.	SCALE:	1" = 60'
NOTES:			

Tri State Land Surveying, Inc.
(435) 781-2501
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

ENDURING RESOURCES

SOUTHAM CANYON 10-25-24-32
SOUTHAM CANYON 10-25-14-32
Section 32, T10S, R25E, S.L.B.&M.



Note:
Flare pit is to be located at least 100' from well head.

REFERENCE POINTS

175' WESTERLY = 5765.4'

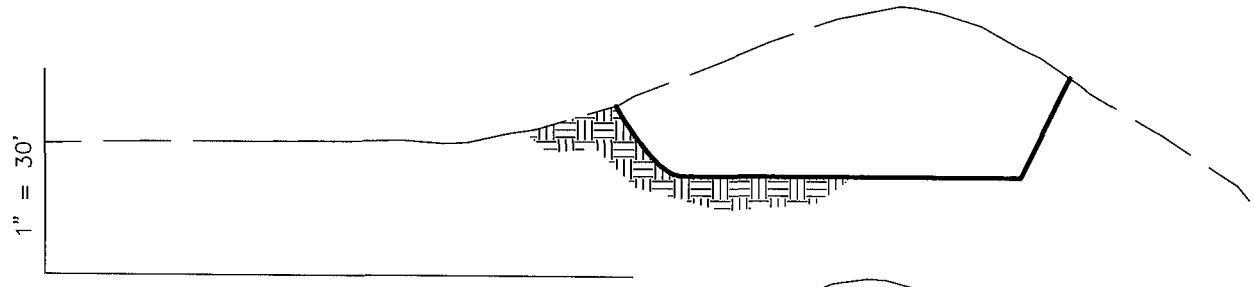
225' WESTERLY = 5765.8'

SURVEYED BY: J.H.	DATE DRAWN: 10-27-05	Tri State Land Surveying, Inc. (435) 781-2501	SHEET 4 OF 10
DRAWN BY: F.T.M.	SCALE: 1" = 60'	180 NORTH VERNAL AVE. VERNAL, UTAH 84078	
NOTES:			

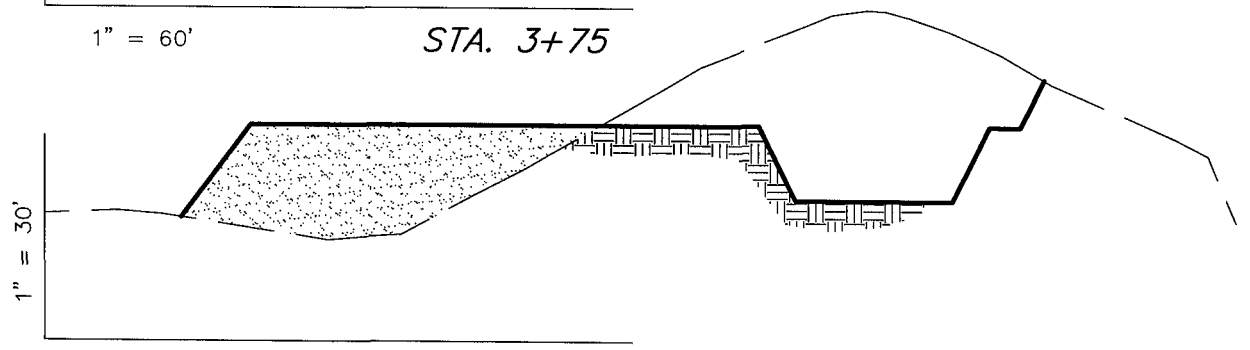
ENDURING RESOURCES

CROSS SECTIONS

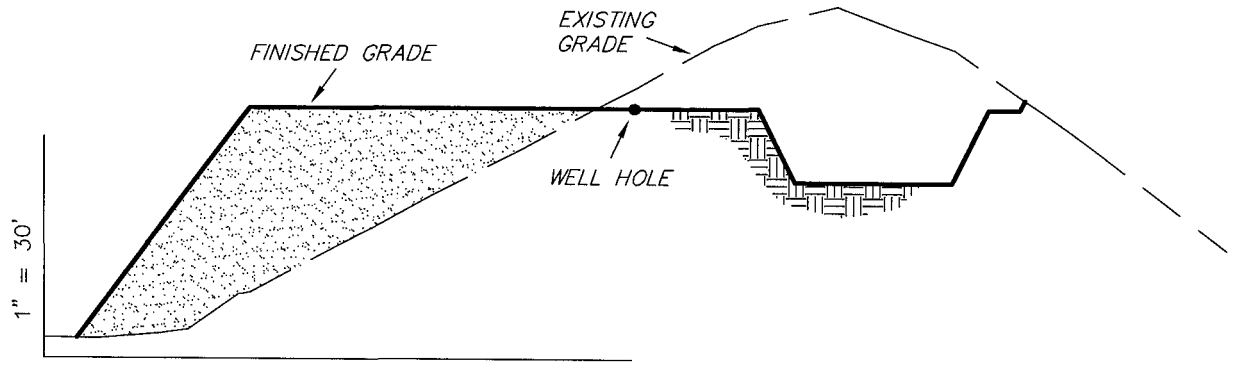
SOUTHAM CANYON 10-25-24-32
SOUTHAM CANYON 10-25-14-32



STA. 3+75



STA. 2+75



STA. 1+95

STA. 0+00

ESTIMATED EARTHWORK QUANTITIES
(No Shrink or swell adjustments have been used)
(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	23,330	21,570	Topsoil is not included in Pad Cut	1,760
PIT	5,390	0		5,390
TOTALS	28,720	21,570	2,070	7,150

NOTE:
UNLESS OTHERWISE NOTED
CUT SLOPES ARE AT 1:1
FILL SLOPES ARE AT 1.5:1

SURVEYED BY:	J.H.	DATE DRAWN:	10-27-05
DRAWN BY:	F.T.M.	SCALE:	1" = 60'
NOTES:			

Tri State Land Surveying, Inc.
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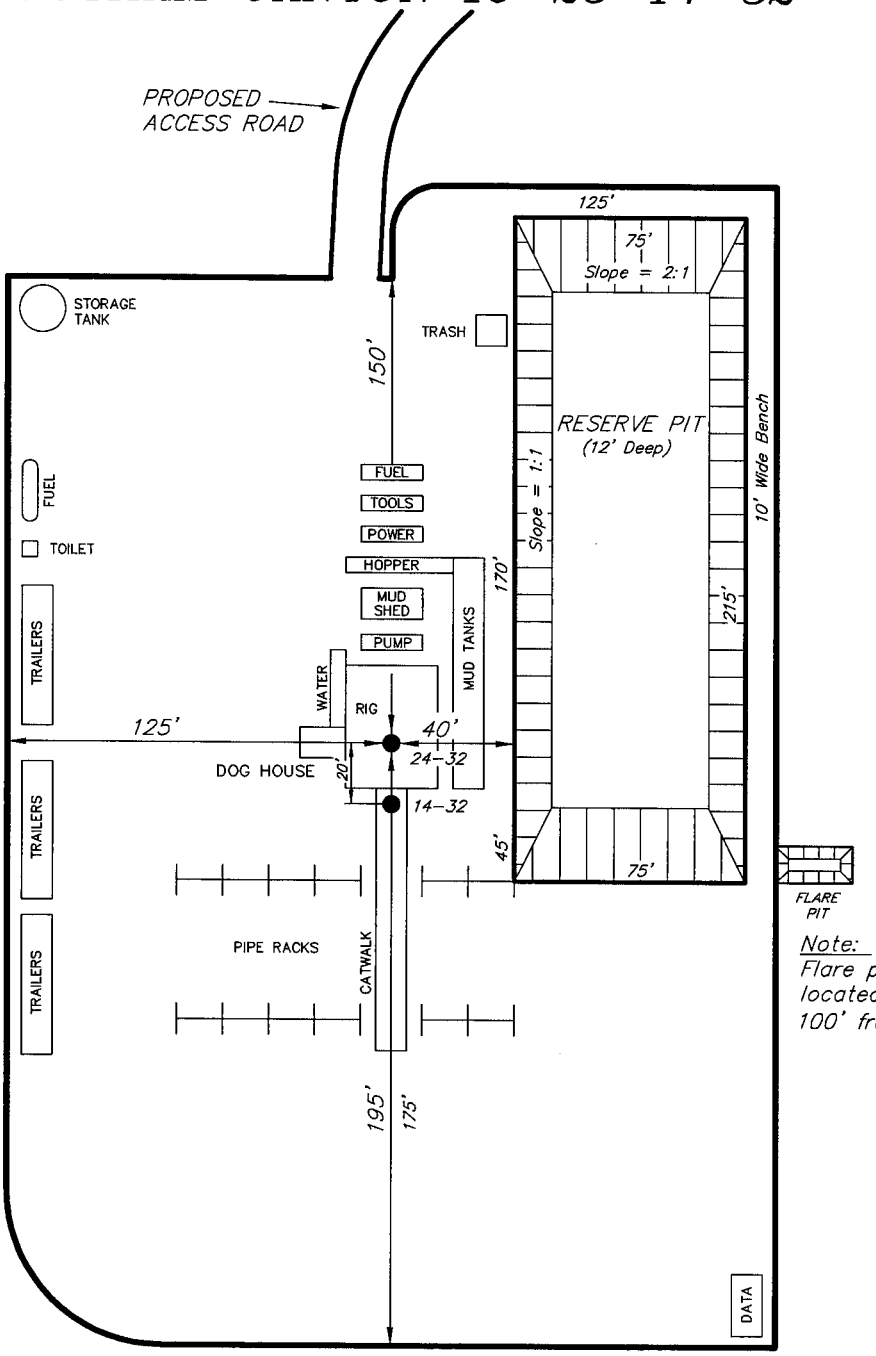
ENDURING RESOURCES

TYPICAL RIG LAYOUT

SOUTHAM CANYON 10-25-24-32
SOUTHAM CANYON 10-25-14-32



Note:
Flare pit is to be located at least 100' from well head.

SURVEYED BY:	J.H.	DATE DRAWN:	10-27-05	
DRAWN BY:	F.T.M.	SCALE:	1" = 60'	
NOTES:				

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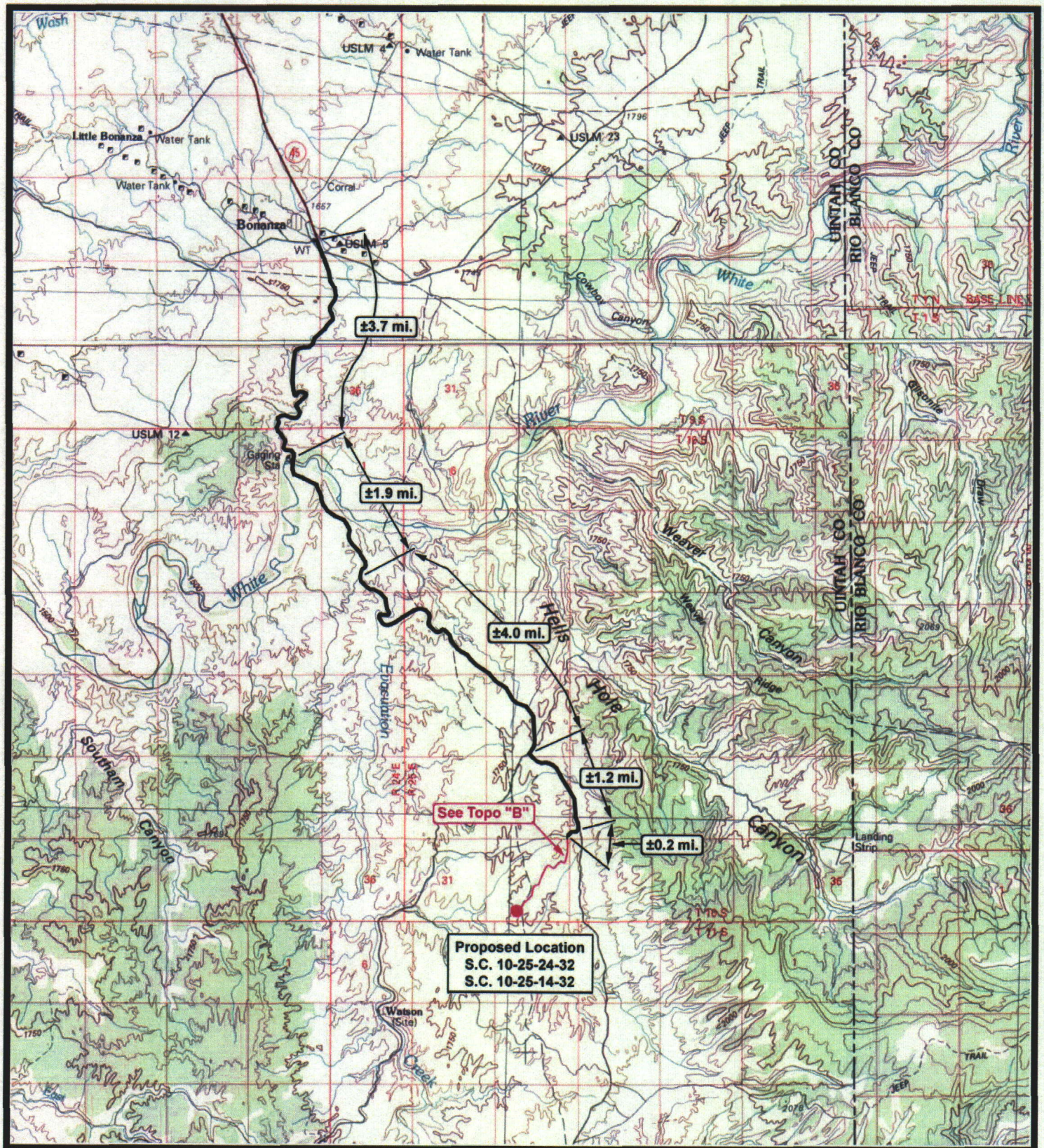

ENDURING RESOURCES

Southam Canyon 10-25-24-32
Southam Canyon 10-25-14-32
Pad Location: SESW of Sec. 32, T10S, R25E, S.L.B.&M.

N

Tri-State Land Surveying Inc.
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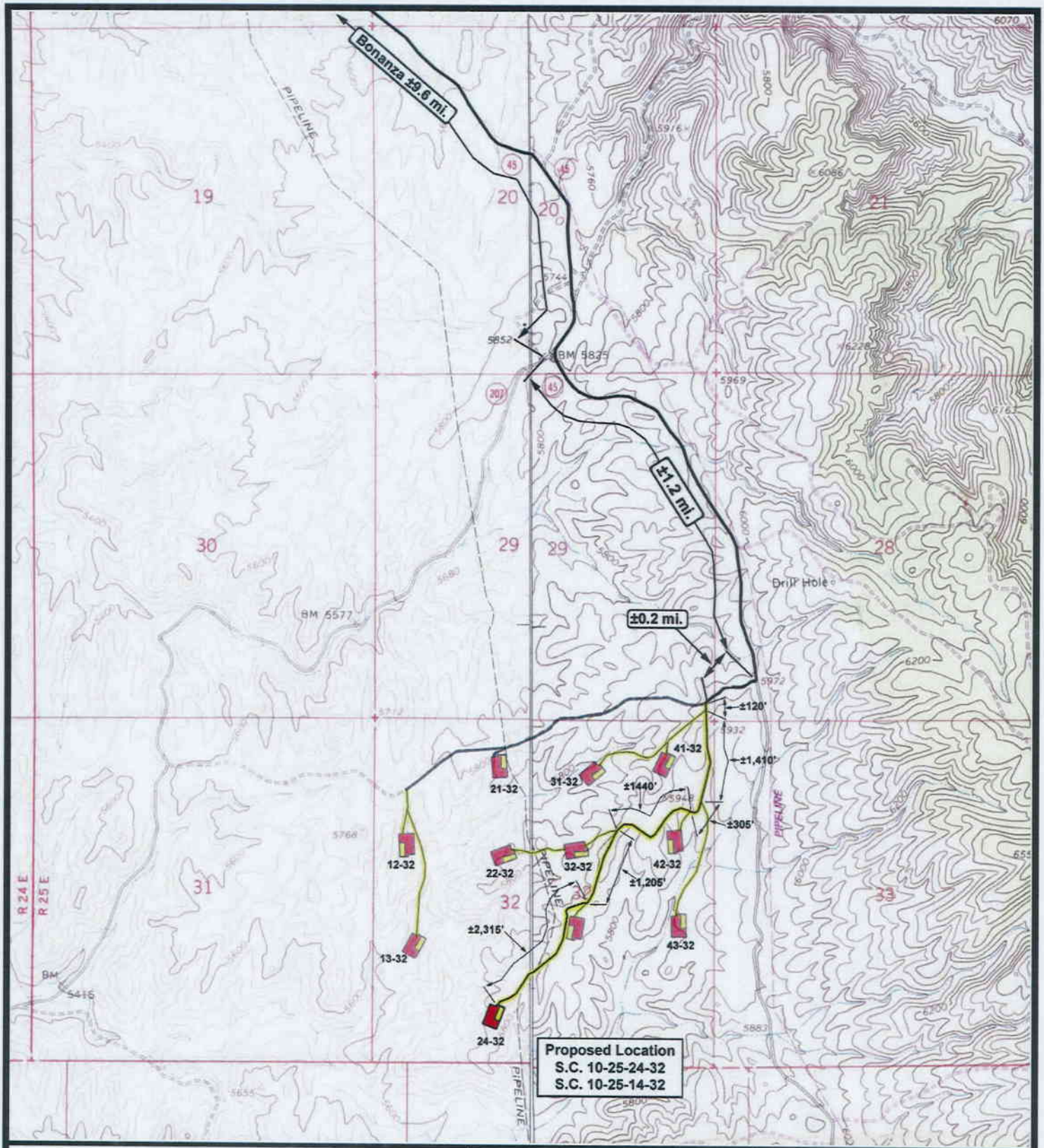
180 North Vernal Ave. Vernal, Utah 84078

Legend
- Existing Road
- Proposed Access

SCALE: 1 = 100,000
DRAWN BY: bgm
DATE: 11-11-2005

TOPOGRAPHIC MAP "A"

SHEET 8 OF 11



ENDURING RESOURCES

Southam Canyon 10-25-24-32
Southam Canyon 10-25-14-32
Pad Location: SESW of Sec. 32, T10S, R25E, S.L.B.&M.

N

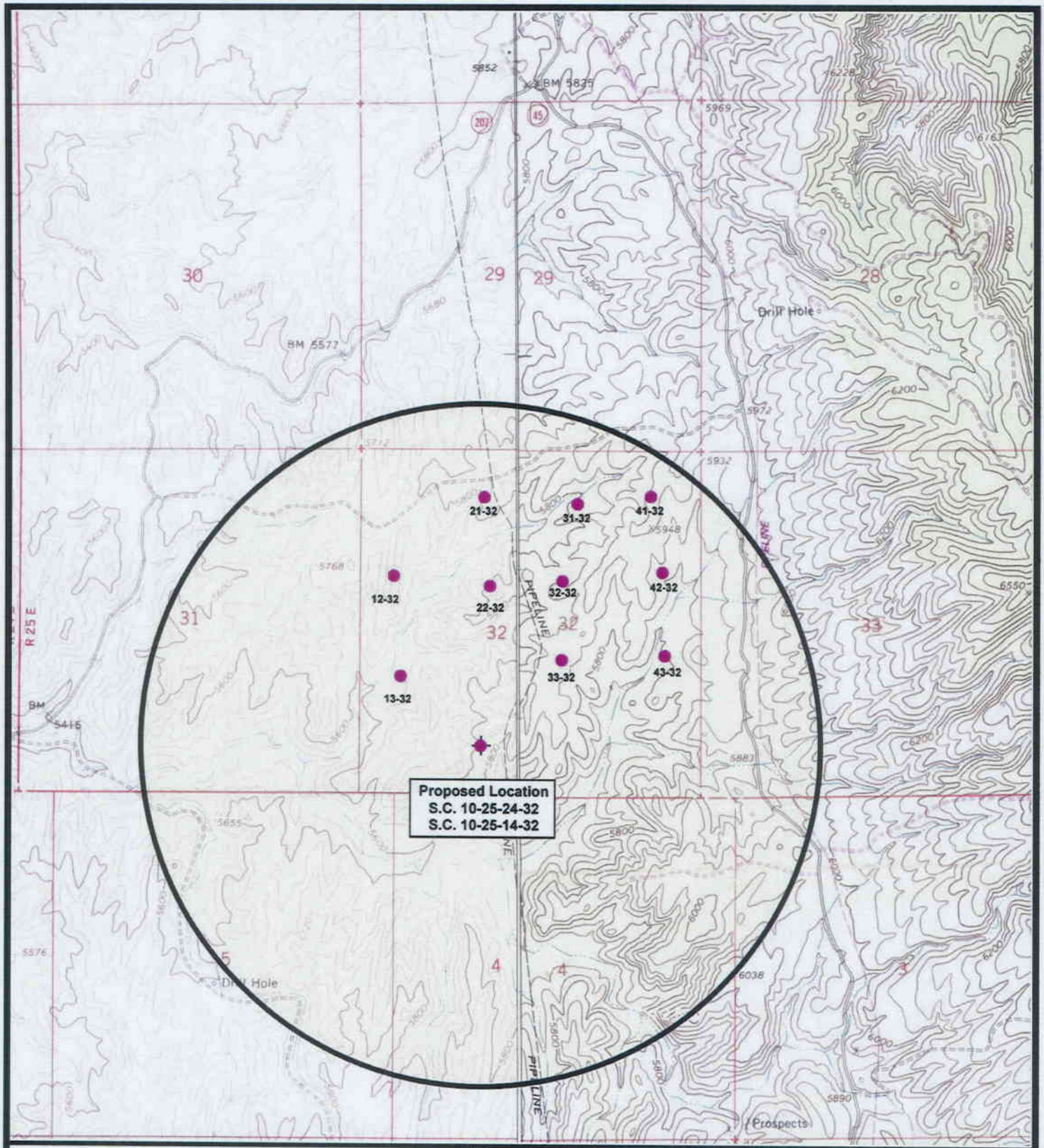
Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

Legend
- Existing Road
- Proposed Access

SCALE: 1" = 2,000'
DRAWN BY: bgm
DATE: 07-17-2006

TOPOGRAPHIC MAP "B"

SHEET 9 OF 11



ENDURING RESOURCES

Southam Canyon 10-25-24-32
Southam Canyon 10-25-14-32
Pad Location: SESW of Sec. 32, T10S, R25E, S.L.B.&M.

N

Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

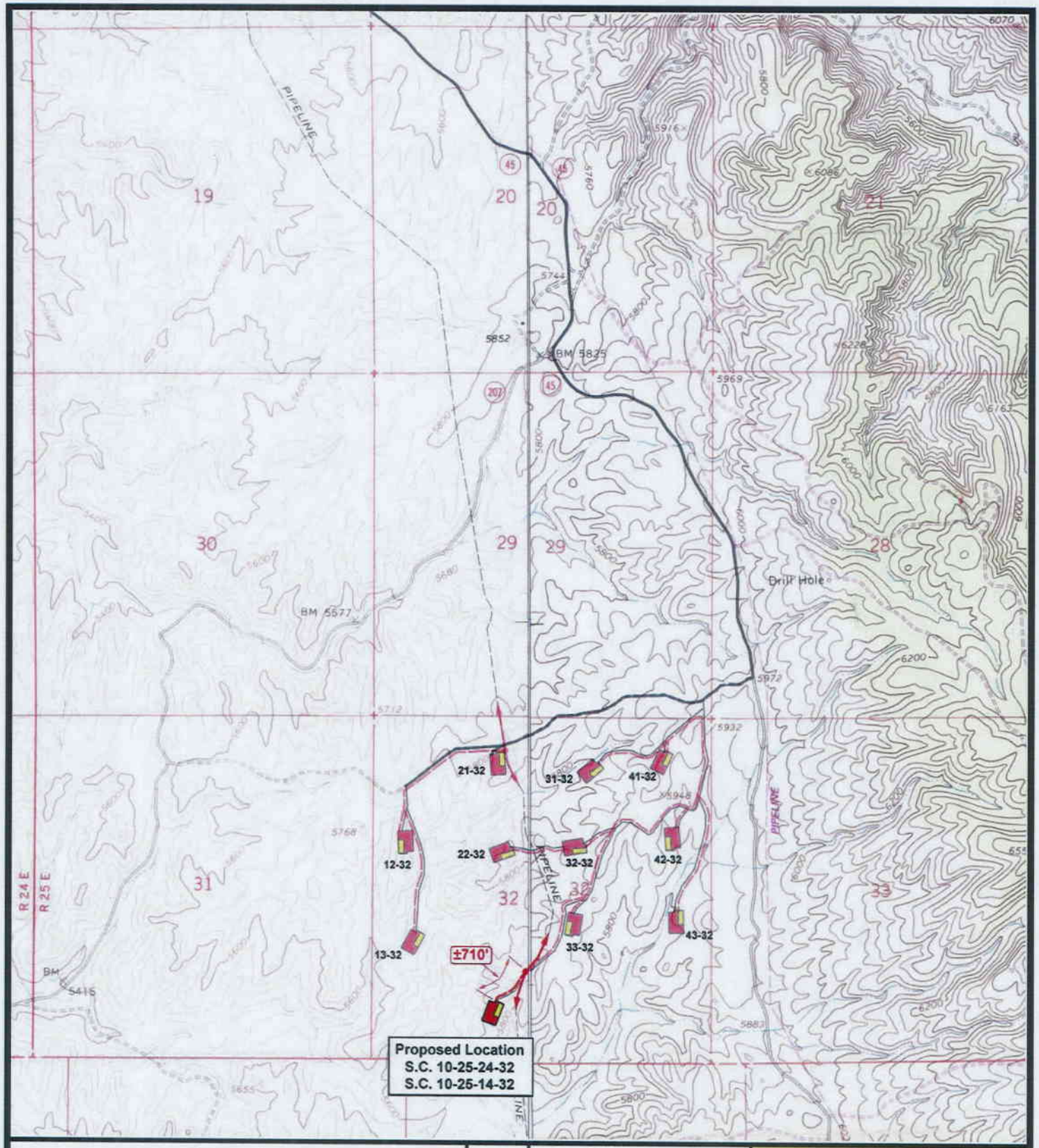
Legend

- Location
- One-Mile Radius

SCALE: 1" = 2,000'
DRAWN BY: bgm
DATE: 07-17-2006

TOPOGRAPHIC MAP "C"

SHEET 10 OF 11



ENDURING RESOURCES

Southam Canyon 10-25-24-32
Southam Canyon 10-25-14-32
Pad Location: SESW of Sec. 32, T10S, R25E, S.L.B.&M.

N

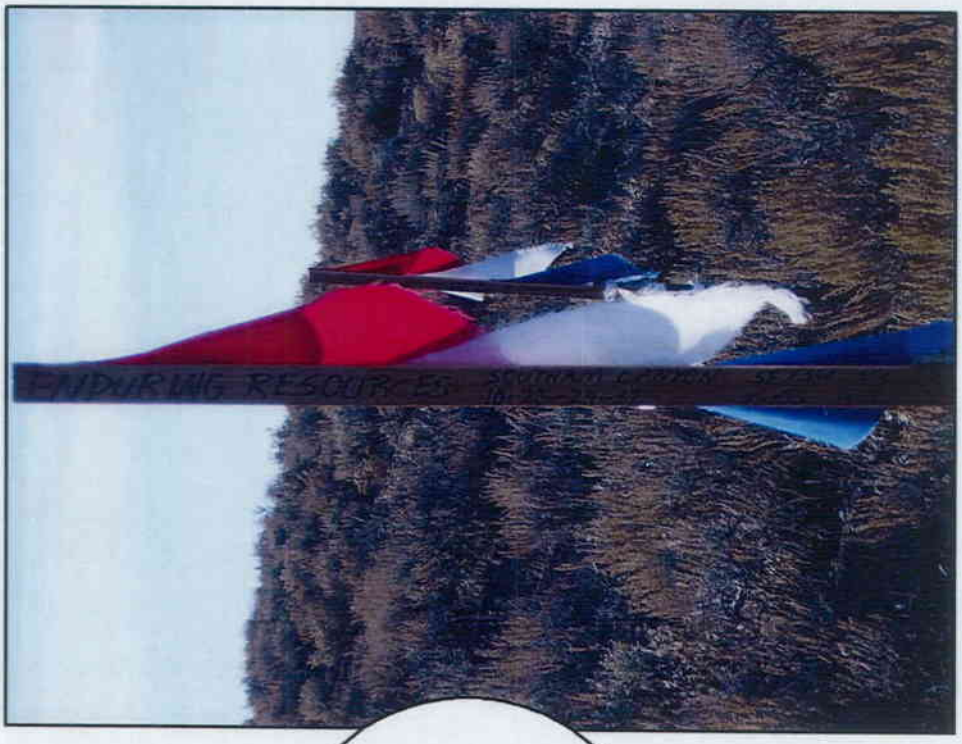
Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

Legend
- Roads
- Existing Gas Line
- Proposed Gas Line

SCALE: 1" = 2,000'
DRAWN BY: bgm
DATE: 07-17-2006

TOPOGRAPHIC MAP "D"

SHEET 11 OF 11



CENTER STAKE

ENDURING RESOURCES
S.C. 10-25-24-32 & S.C. 10-25-14-32
Pad Location:
SESW of Sec. 32, T10S, R25E, S.L.B.&M.

Date Photographed: 11/15/2005
Date Drawn: 07/17/2006
Drawn By: bgm

Tri-State Land Surveying Inc.
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LOOKING SOUTH
ACCESS

NORTH

ENDURING RESOURCES

S.C. 10-25-24-32 & S.C. 10-25-14-32

Pad Location:
SESW of Sec. 32, T10S, R25E, S.L.B.&M.

Date Photographed: 11/15/2005

Date Drawn: 07/17/2006

Drawn By: bgm

Tri-State Land Surveying Inc.

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EAST

SOUTH

ENDURING RESOURCES

S.C. 10-25-24-32 & S.C. 10-25-14-32

Pad Location:
SESW of Sec. 32, T16S, R25E, S.L.B.&M.

Date Photographed: 11/15/2005

Date Drawn: 11/15/2005

Drawn By: bgm

Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

WEST

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 07/20/2006

API NO. ASSIGNED: 43-047-38396

WELL NAME: SOUTHAM CYN 10-25-14-32

OPERATOR: ENDURING RESOURCES, LLC (N2750)

PHONE NUMBER: 303-350-5114

CONTACT: AL ARLIAN

PROPOSED LOCATION:

SESW 32 100S 250E

SURFACE: 0703 FSL 1881 FWL

BOTTOM: 0658 FSL 0661 FWL

COUNTY: UINTAH

LATITUDE: 39.90004 LONGITUDE: -109.1271

UTM SURF EASTINGS: 660114 NORTHINGS: 4418132

FIELD NAME: WILDCAT (1)

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering	DKD	9/20/06
Geology		
Surface		

LEASE TYPE: 3 - State

LEASE NUMBER: ML-47065

SURFACE OWNER: 3 - State

PROPOSED FORMATION: MVRD

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

✓ Plat

✓ Bond: Fed[] Ind[] Sta[] Fee[]
(No. RLB0008031)

N Potash (Y/N)

N Oil Shale 190-5 (B) or 190-3 or 190-13

✓ Water Permit
(No. 49-222)

Y RDCC Review (Y/N)
(Date: 08/18/2006)

N/A Fee Surf Agreement (Y/N)

N/A Intent to Commingle (Y/N)

LOCATION AND SITING:

___ R649-2-3.

Unit: _____

___ R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells

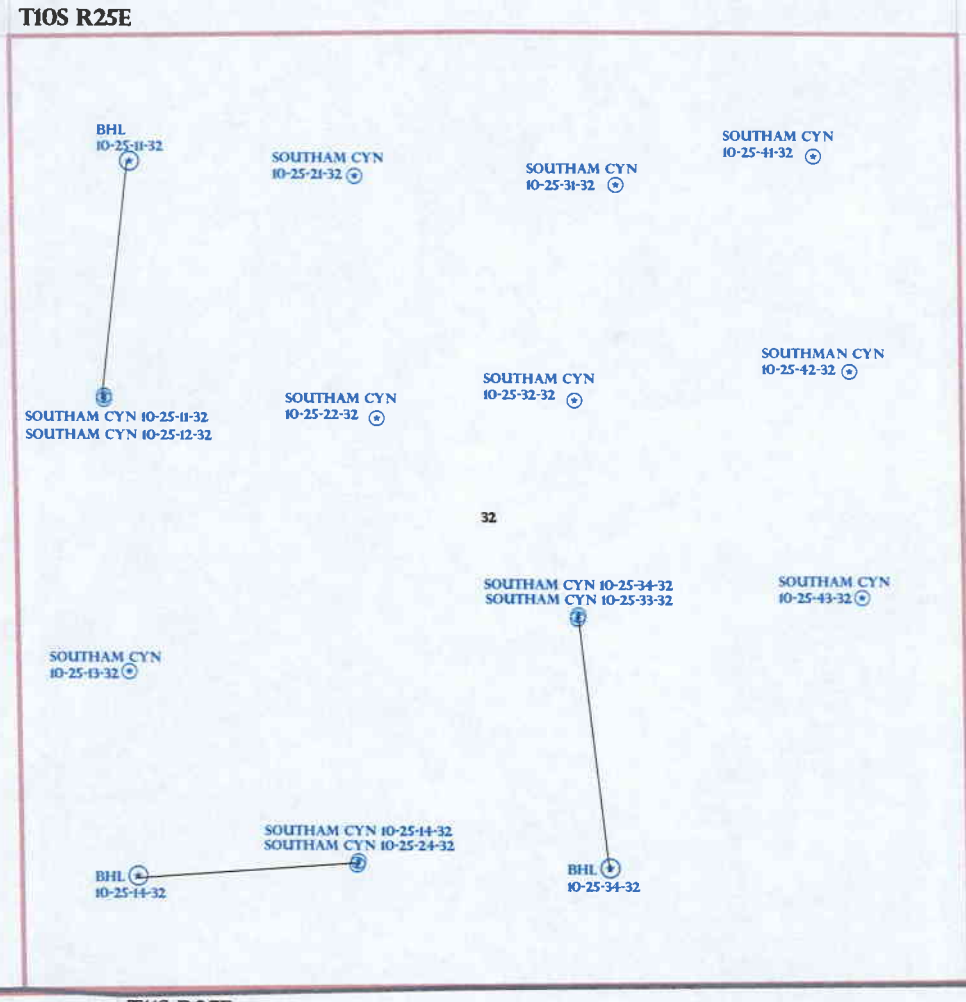
___ R649-3-3. Exception

___ Drilling Unit
Board Cause No: _____
Eff Date: _____
Siting: _____

✓ R649-3-11. Directional Drill

COMMENTS: Needs Presite (03-07-06)

STIPULATIONS: 1-Spacing Slip
2-STATEMENT OF BASIS
3-Surf. Csg Cmt Stip



OPERATOR: ENDURING RES LLC (N2750)

SEC: 32 T.10S R. 25E

FIELD: WILDCAT (001)

COUNTY: UINTAH

SPACING: R649-3-11 / DIRECTIONAL DRILLING

Field Status
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

Unit Status
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Wells Status
- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING

Utah Oil Gas and Mining

N
W E
S

PREPARED BY: DIANA WHITNEY
DATE: 03-AUGUST-2006

DIVISION OF OIL, GAS AND MINING
APPLICATION FOR PERMIT TO DRILL
STATEMENT OF BASIS

OPERATOR: ENDURING RESOURCES, LLC.
WELL NAME & NUMBER: SOUTHAM CANYON 10-25-14-32
API NUMBER: 43-047-38396
LOCATION: 1/4,1/4 SESW Sec: 32 TWP: 10S RNG: 25E 703' FSL 1881' FWL

Geology/Ground Water:

Enduring proposes to set 2,000' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 5,800'which is below the proposed T.D. A search of Division of Water Rights records shows no water well within a 10,000 foot radius of the center of Section 32. The surface formation at this site is the Uinta-Green River Formation transition . The Uinta Formation is made up of lenticular sandstones interbedded with shales and is expected to have limited value as an aquifer. The Green river Formation should be found near the surface. The Green River Formation may contain useable aquifers but they should be adequately protected by the proposed casing and cementing program.

Reviewer: Brad Hill **Date:** 08-24-06

Surface:

The pre-drill investigation of the surface was performed on 03/07/2006. This site is on state surface, with state minerals. Due to harsh weather, Jim Davis from SITLA was not present but expressed that the pre-sites should still take place in his absence. Doug Hammond expressed willingness and desire to paint the location tanks in a color to closely match the surroundings. Ben Williams of DWR stated that this section is classified as critical deer and substantial elk winter range. Because of the critical deer classification, Mr. Williams requested that the location be closed to drilling and construction from November 15 to April 15.

Reviewer: Richard Powell **Date:** 03/07/2006

Conditions of Approval/Application for Permit to Drill:

1. A synthetic liner with a minimum thickness of 12 mils shall be properly installed and maintained in the reserve pit.

ON-SITE PREDRILL EVALUATION
Division of Oil, Gas and Mining

OPERATOR: ENDURING RESOURCES, LLC
WELL NAME & NUMBER: SOUTHAM CANYON 10-25-14-32
API NUMBER: 43-047-38396
LEASE: ML-47065 **FIELD/UNIT:** UNDESIGNATED
LOCATION: 1/4,1/4 SESW **Sec:** 32 **TWP:** 10S **RNG:** 25E 1881' FWL 703' FSL
LEGAL WELL SITING: 460 F **SEC. LINE;** 460 F **1/4,1/4 LINE;** 920 F **ANOTHER WELL.**
GPS COORD (UTM): 4418145Y 0660122X **SURFACE OWNER:** SITLA.

PARTICIPANTS

Richard Powell (DOGM), Doug Hammond (Enduring Resources), Larry Rowell (Ponderosa Oilfield Service), Chris Stewart & Dustin Laub (TriState Land Surveying).

REGIONAL/LOCAL SETTING & TOPOGRAPHY

Location sits near the top of a steep north-south running ridge. Hills and ridges dominate the terrain of this section, with rock formations protruding from the tops of many of the slopes. The slopes of the western half of this section are much more gradual. The ridges generally seem to run from north to south. Drainage is westward to Evacuation Creek. To the east of this section, are much taller and steeper slopes. Bonanza, UT is approximately 11 miles to the north.

SURFACE USE PLAN

CURRENT SURFACE USE: Wildlife & Livestock grazing.

PROPOSED SURFACE DISTURBANCE: Location will be 375' by 250'. Proposed new access road to be approximately 6795'. The last 2,315' of this will access this well only.

LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS: See attached map from GIS database.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: All production facilities will be on location and added after drilling well. Pipeline to follow access road.

SOURCE OF CONSTRUCTION MATERIAL: Al construction material will be borrowed from site during construction of location.

ANCILLARY FACILITIES: None will be required.

WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OF CONCERNS? (EXPLAIN): Unlikely.

WASTE MANAGEMENT PLAN:

Drilled cuttings will be settled into reserve pit. Liquids from pit will

be allowed to evaporate. Formation water will be confined to storage tanks. Portable toilets, sewage holding tanks, and onsite sewage treatment equipment will be handled by commercial contractors and regulated by the appropriate health authority. Trash will be contained in trash baskets and disposed of at an approved landfill.

ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: none

FLORA/FAUNA: Sagebrush, Greasewood, spiny hopsage, shadscale / Deer, elk, Rodents, Coyote, Songbirds, Rabbit, Bobcat, Pronghorn, Cougar.

SOIL TYPE AND CHARACTERISTICS: Light brown silty clay with scattered rock and shale.

EROSION/SEDIMENTATION/STABILITY: Very little natural erosion. Sedimentation and stability are not a problem and location construction shouldn't cause an increase in stability or erosion problems.

PALEONTOLOGICAL POTENTIAL: Paleontology study by IPC on 3/1/06.

RESERVE PIT

CHARACTERISTICS: 215' BY 75' and twelve feet deep.

LINER REQUIREMENTS (Site Ranking Form attached): A liner will be required for reserve pit. Site ranking score is 25.

SURFACE RESTORATION/RECLAMATION PLAN

As per SITLA.

SURFACE AGREEMENT: As per SITLA.

CULTURAL RESOURCES/ARCHAEOLOGY: Archaeology study done by MOAC on 2/20/06.

OTHER OBSERVATIONS/COMMENTS

This location is shared with the Southam Canyon 10-25-24-32.

ATTACHMENTS

Photos of this site were taken and placed on file.

RICHARD POWELL
DOGM REPRESENTATIVE

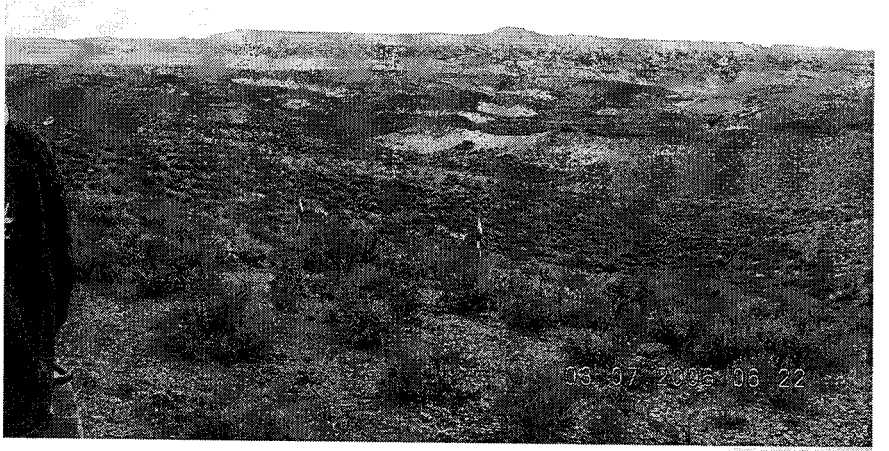
03/07/06 11:55 AM
DATE/TIME

Evaluation Ranking Criteria and Ranking Score
For Reserve and Onsite Pit Liner Requirements

Site-Specific Factors	Ranking	Site Ranking
Distance to Groundwater (feet)		
>200	0	
100 to 200	5	
75 to 100	10	
25 to 75	15	
<25 or recharge area	20	0
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	0
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	20	0
Distance to Other Wells (feet)		
>1320	0	
300 to 1320	10	
<300	20	0
Native Soil Type		
Low permeability	0	
Mod. permeability	10	
High permeability	20	20
Fluid Type		
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	10	
TDS >10000 or Oil Base Mud Fluid containing significant levels of hazardous constituents	15 20	5
Drill Cuttings		
Normal Rock	0	
Salt or detrimental	10	0
Annual Precipitation (inches)		
<10	0	
10 to 20	5	
>20	10	0
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	
>50	10	0
Presence of Nearby Utility Conduits		
Not Present	0	
Unknown	10	
Present	15	0

Final Score 25 (Level I Sensitivity)

Sensitivity Level I = 20 or more; total containment is required.
Sensitivity Level II = 15-19; lining is discretionary.
Sensitivity Level III = below 15; no specific lining is required.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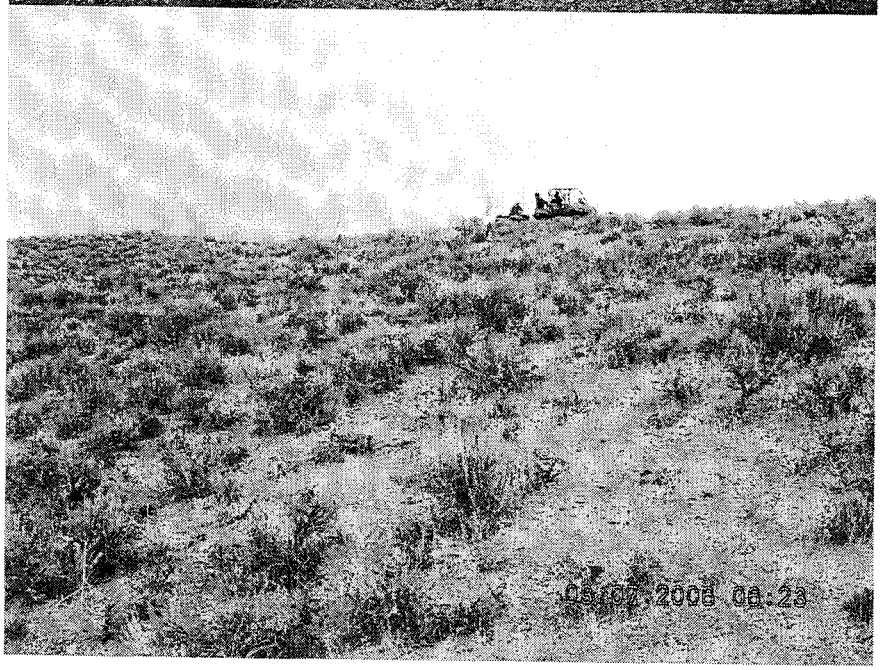
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STATE ACTIONS
Resource Development Coordinating Committee
Governor's Office of Planning and Budget
5110 State Office Building
SLC, UT 84114
Phone No. 537-9230

1. State Agency Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801	**2. Approximate date project will start:** Upon Approval or August 17, 2006

3. Title of proposed action:
Application for Permit to Drill

4. Description of Project:

Enduring Resources, LLC proposes to drill the Southam Canyon 10-25-14-32 well (wildcat) on a State lease ML-47065, Uintah County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.

5. Location and detailed map of land affected (site location map required, electronic GIS map preferred)
(include UTM coordinates where possible) **(indicate county)**
703' FSL 1881' FWL, Bottom Location 658' FSL 661' FWL, SE/4 SW/4, Section 32, Township 10 South, Range 25 East, Uintah County, Utah

6. Possible significant impacts likely to occur:
Surface impacts include up to five acres of surface disturbance during the drilling and completion phase (estimated for five weeks duration). If oil and gas in commercial quantities is discovered, the location will be reclaimed back to a net disturbance of between one and two acres – not including road, pipeline, or utility infrastructure. If no oil or gas is discovered, the location will be completely reclaimed.

7. Identify local government affected
a. Has the government been contacted? No.
b. When?
c. What was the response?
d. If no response, how is the local government(s) likely to be impacted?

8. For acquisitions of land or interests in land by DWR or State Parks please identify state representative and state senator for the project area. Name and phone number of state representative, state senator near project site, if applicable:
a. Has the representative and senator been contacted? N/A

9. Areawide clearinghouse(s) receiving state action: (to be sent out by agency in block 1)
Uintah Basin Association of Governments

10. For further information, contact: **Diana Whitney** **Phone:** (801) 538-5312	**11. Signature and title of authorized officer** Gil Hunt, Associate Director **Date:** August 3, 2006

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: ML-47065	6. SURFACE: State
1A. TYPE OF WORK: DRILL ☑ REENTER ☐ DEEPEN ☐	7. IF INDIAN, ALLOTTEE OR TRIBE NAME:
B. TYPE OF WELL: OIL ☐ GAS ☑ OTHER _____ SINGLE ZONE ☐ MULTIPLE ZONE ☑	8. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: Enduring Resources, LLC	9. WELL NAME and NUMBER: Southam Canyon 10-25-14-32
3. ADDRESS OF OPERATOR: 475 17th St., Ste 1500 CITY Denver STATE CO ZIP 80220 / PHONE NUMBER: (303) 350-5114	10. FIELD AND POOL, OR WILDCAT: ~~Undesignated~~ Wildcat
4. LOCATION OF WELL (FOOTAGES) 660114 X 4418132 Y 39.900044 -109.127085 AT SURFACE: 703' FSL - 1881' FWL SE-SW 32-10S-25E AT PROPOSED PRODUCING ZONE: 658' FSL - 661' FWL SW-SW 32-10S-25E 659742 X 4418111 39.899931 -109.131436	11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSW 32 10S 25E
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 12.3 Southwest of Bonanza, UT	12. COUNTY: Uintah / 13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): 703' (SL) 658' (BHL)	16. NUMBER OF ACRES IN LEASE: 640 / 17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40 acres
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): 1000' +	19. PROPOSED DEPTH: 4,310 / 20. BOND DESCRIPTION: RLB0008031
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5818' RT-KB	22. APPROXIMATE DATE WORK WILL START: 9/1/2006 / 23. ESTIMATED DURATION: 20 days

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT			
20"	14" line pipe	40	3 yards	Ready Mix		
11"	8-5/8" J-55 24#	2,000	Premium Lead	138 sxs	3.50	11.1
			Premium Tail	138 sxs	1.15	15.8
7-7/8"	4-1/2" N-80 11.6#	4,310	Class G	11 sxs	3.3	11.0
			50/50 Poz Class G	456 sxs	1.56	14.3

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- ☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☑ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
- ☑ COMPLETE DRILLING PLAN
- ☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE Al Arlian DATE 7/12/2006

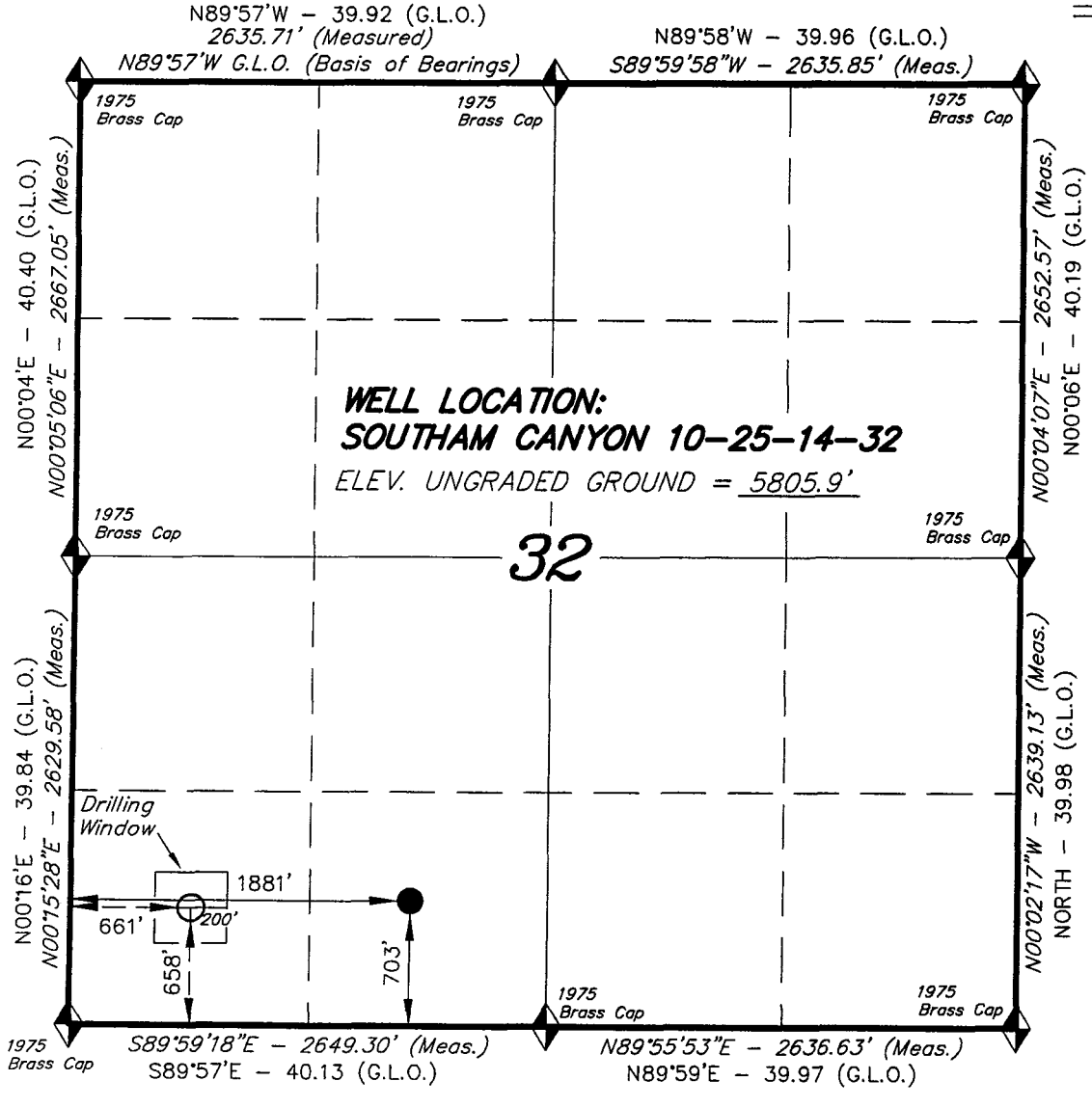
(This space for State use only)

API NUMBER ASSIGNED: 43-047-38396 APPROVAL:

RECEIVED
JUL 20 2006
DIV. OF OIL, GAS & MINING

(11/2001) (See Instructions on Reverse Side)

T10S, R25E, S.L.B.&M.



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (SOUTHAM CANYON)

SOUTHAM CANYON 10-25-14-32
(Surface Location) NAD 83
LATITUDE = 39° 54' 00.41"
LONGITUDE = 109° 07' 39.61"

ENDURING RESOURCES

WELL LOCATION, TOP OF HOLE FOR THE SOUTHAM CANYON 10-25-14-32, THE TOP OF HOLE LOCATED AS SHOWN IN THE SE 1/4 SW 1/4, THE BOTTOM HOLE LOCATED AS SHOWN IN THE SW 1/4 SW 1/4 OF SECTION 32, T10S, R25E, S.L.B.&M. UINTAH COUNTY, UTAH.

N

NOTES:

1. The Bottom of hole bears S87°55'12"W 1221.13' from the Top of Hole.

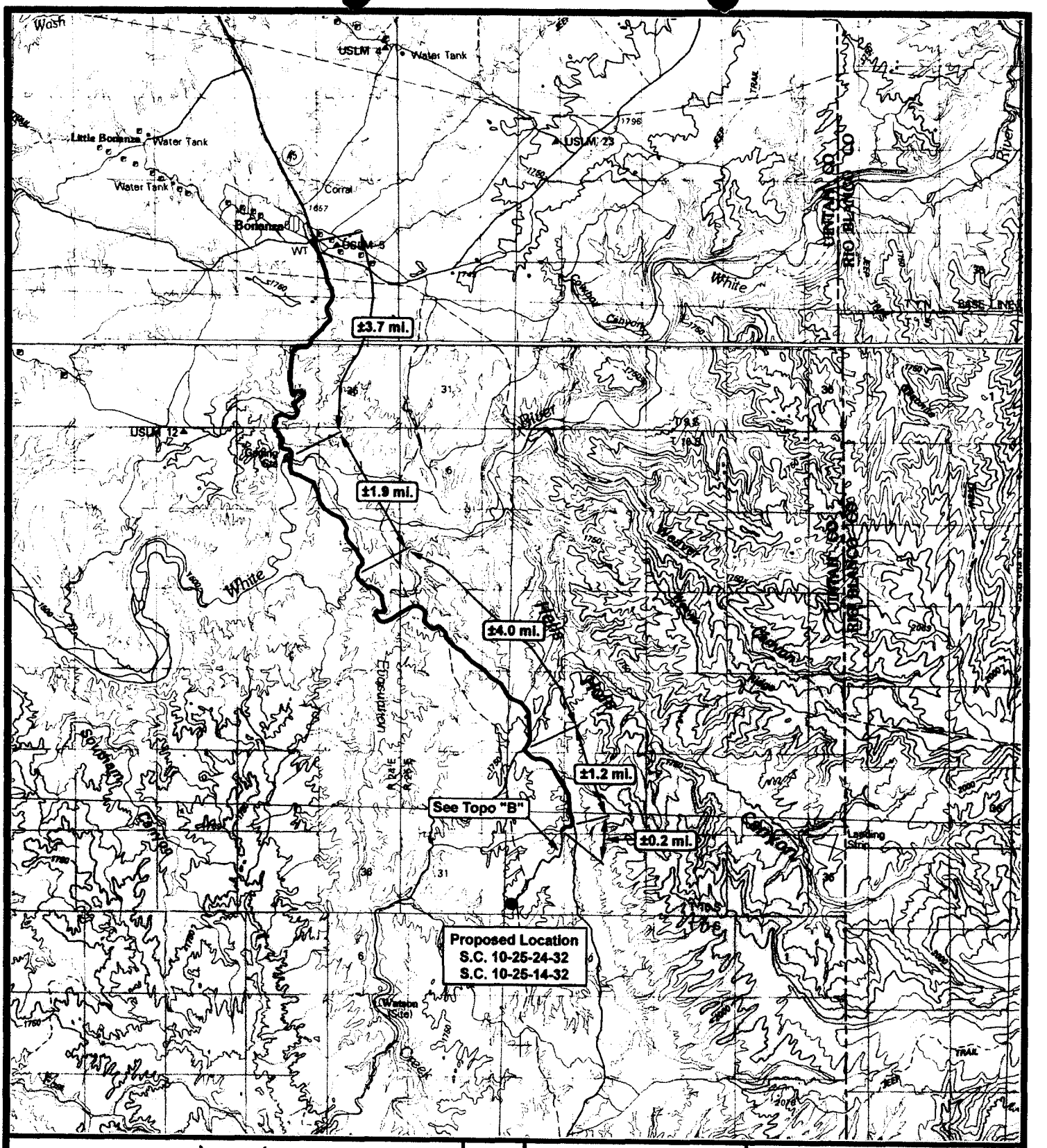
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. No.189377

REGISTERED LAND SURVEYOR
STACY W. STEWART
REGISTRATION No. 189377
STATE OF UTAH

REGISTERED LAND SURVEYOR
STATE OF UTAH

TRI STATE LAND SURVEYING & CONSULTING
180 NORTH VERNAL AVE. – VERNAL, UTAH 84078
(435) 781-2501

DATE DRAWN: 10-27-05	SURVEYED BY: J.H.	SHEET 2b OF 10
REVISED:	DRAWN BY: F.T.M.	
NOTES:	SCALE: 1" = 1000'	



ENDURING RESOURCES

Southam Canyon 10-25-24-32
Southam Canyon 10-25-14-32
Pad Location: SESW of Sec. 32, T10S, R25E, S.L.B.&M.

N

Tri-State Land Surveying Inc.
(435) 781-2501
180 North Vernal Ave. Vernal, Utah 84078

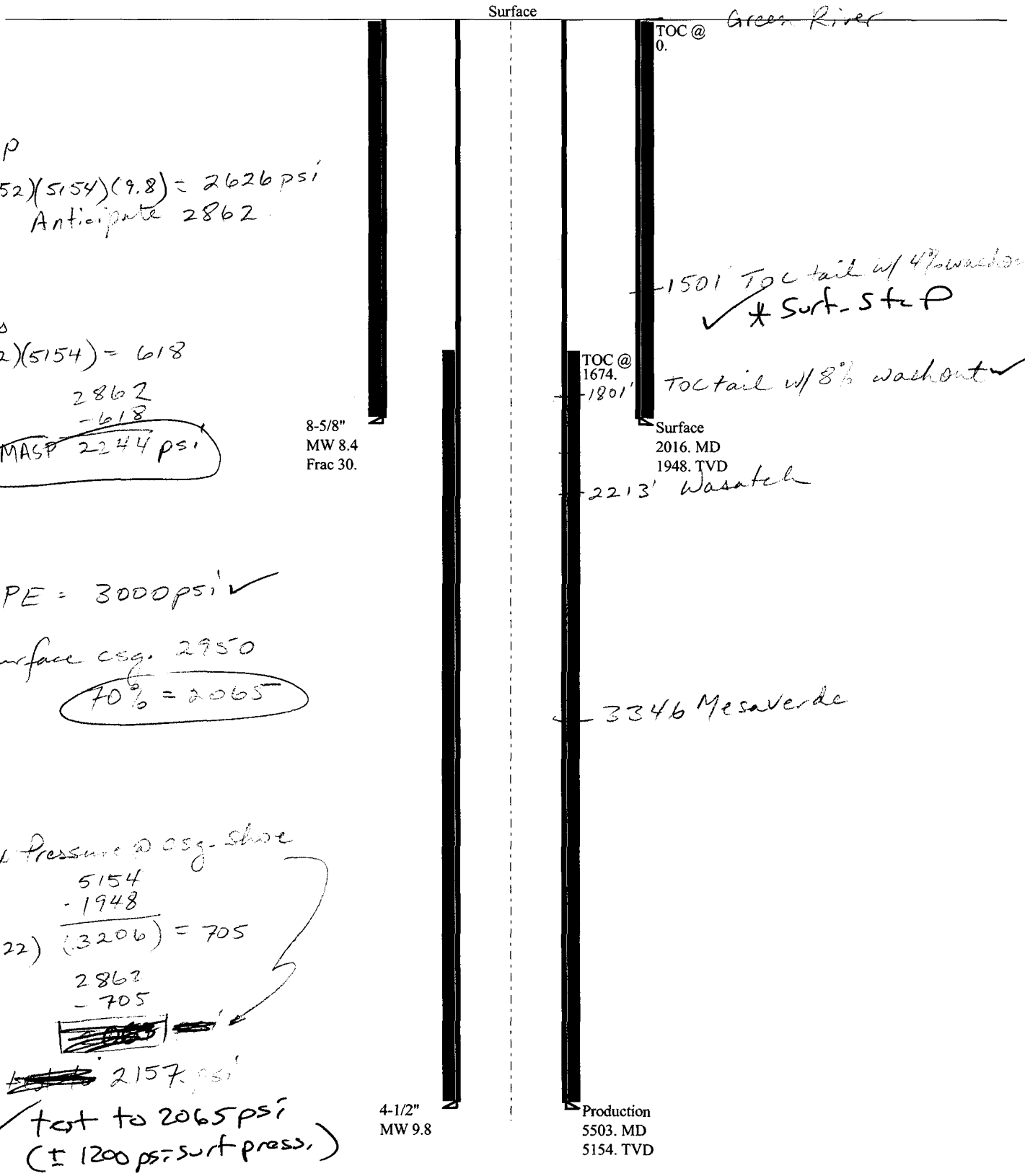
SCALE: 1 = 100,000
DRAWN BY: bgm
DATE: 11-11-2005

TOPOGRAPHIC MAP "A"

SHEET 8 OF 11

[redacted]8-06 Enduring Southam Cyn [redacted]-25-14-32

Casing Schematic



BHP

(0.052)(5154)(9.8) = 2626 psi

Anticipate 2862

Gas

(0.12)(5154) = 618

2862

-618

MASP 2244 psi

BOPE = 3000psi ✓

Surface csg. 2950

70% = 2065

Max Pressure @ csg. shoe

5154

-1948

(0.22) (3206) = 705

2862

-705

~~2157~~ 2157 psi

✓ test to 2065psi

(± 1200 psi surf press.)

✓ Adequate DWD 9/20/06

Well name:	**08-06 Enduring Southam Cyn 10-25-14-32**
Operator:	**Enduring Resources, LLC (N2750)**
String type:	Surface
Project ID:	43-047-38396
Location:	Uintah County

Design parameters:

Collapse

Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 2,005 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,239 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 1,736 ft

Environment:

H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 102 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,500 ft

Cement top: Surface

Directional well information:
Kick-off point 500 ft
Departure at shoe: 398 ft
Maximum dogleg: 5 °/100ft
Inclination at shoe: 35.8 °

Re subsequent strings:
Next setting depth: 5,154 ft
Next mud weight: 9.800 ppg
Next setting BHP: 2,624 psi
Fracture mud wt: 30.000 ppg
Fracture depth: 1,973 ft
Injection pressure 3,075 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2016	8.625	24.00	J-55	ST&C	1948	2016	7.972	97.1

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	850	1290	1.518	2239	2950	1.32	41	244	5.97 J

Prepared by: Helen Sadik-Macdonald
Utah Div. of Oil & Mining
Phone: 801-538-5357
FAX: 801-359-3940
Date: August 29,2006
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 1948 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	**08-06 Enduring Southam Cyn 10-25-14-32**
Operator:	**Enduring Resources, LLC (N2750)**
String type:	Production
Project ID:	43-047-38396
Location:	Uintah County

Design parameters:

Collapse
Mud weight: 9.800 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,005 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,624 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 4,748 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 147 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,500 ft

Cement top: 1,674 ft

Directional well information:
Kick-off point 500 ft
Departure at shoe: 1224 ft
Maximum dogleg: 5 °/100ft
Inclination at shoe: 0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	5503	4.5	11.60	N-80	LT&C	5154	5503	3.875	127.6

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	2624	6350	2.420	2624	7780	2.97	51	223	4.37 J

Prepared by: Helen Sadik-Macdonald
Utah Div. of Oil & Mining
Phone: 801-538-5357
FAX: 801-359-3940
Date: August 30,2006
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 5154 ft, a mud weight of 9.8 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

43-047-38396

From: Robert Clark
To: Whitney, Diana
Date: 8/14/2006 10:34:14 AM
Subject: RDCC short turn around responses

The following comments are provided in response to short turn around items **RDCC #6916** through **RDCC #6921,** and **RDCC #6943.**

RDCC #6916, Comments begin: The proposal of Enduring Resources, LLC to drill the **Southam Canyon 10-25-34-32** wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end. RDCC #6917, Comments begin:** The proposal of Enduring Resources, LLC to drill the **Southam Canyon 10-25-14-32** wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end. RDCC #6918, Comments begin:** The proposal of Enduring Resources, LLC to drill the **Southam Canyon 10-25-11-32** wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end. RDCC #6919, Comments begin:** The proposal of the Houston Exploration Company to drill the **North Horseshoe 5-16-6-22** wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for

preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end. RDCC #6920, Comments begin:** The proposal of Petro-Hunt, LLC to drill the **Vonda H. Christensen Family LP 35A-3-1** wildcat well, in Sanpete County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end. RDCC #6921, Comments begin:** The proposal of Petro-Hunt, LLC to drill the **Lamb Trust 31B-1-1** wildcat well, in Sanpete County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end. RDCC #6943, Comments begin:** The proposal of Enduring Resources, LLC to drill the **Long Draw 12-24-31-26** wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end.** Robert ClarkDivision of Air Quality536-4435

CC: Mcneill, Dave; Wright, Carolyn

Enduring
43047-38396

MEMORANDUM

DATE: August 15, 2006

TO: Utah Division of Oil, Gas and Mining, Forestry, Fire, and State Lands, and Resource Development Coordinating Committee

FROM: Utah Geological Survey, Ground Water and Paleontology Program

SUBJECT: UGS comments on RDCC items 6916, 6917, 6918, 6919, 6920, 6921, 6922, and 6943.

6916. Division of Oil, Gas and Mining # ML-47065
Short Turn Around; Sec. 32, T10S, R25E
Uintah Co.
Application for Permit to Drill - proposal to drill a wildcat well the Southam Canyon 10-25-34-32 on a State lease ML-47065

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements.

6917. Division of Oil, Gas and Mining
Short Turn Around;; Sec. 32, T10S, R25E
Uintah Co.
Application for Permit to Drill - proposal to drill a wildcat well the Southam Canyon 10-25-14-32 on a State lease ML-47065

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements.

6918. Division of Oil, Gas and Mining
Short Turn Around; Sec. 32, T10S, R25E
Uintah Co.
Application for Permit to Drill - proposal to drill the Southam Canyon 10-25-11-32 on a State lease ML-47065

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements.

6919. Division of Oil, Gas and Mining
Short Turn Around; Sec. 16, T6S, R22E
Uintah Co.
Application for Permit to Drill - proposal to drill a wildcat well the North Horseshoe 5-16-6-22 on a State lease ML-47969

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements.

6920. Division of Oil, Gas and Mining
Short Turn Around; Sec. 35, T16S, R2E
Sanpete Co.
Application for Permit to Drill - proposal to drill a wildcat well the Vonda H. Christ. Fam. 35A-3-1 on a Fee lease

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements.

6921. Division of Oil, Gas and Mining
Short Turn Around; Sec. 31, T15S, R3E
Sanpete Co.
Application for Permit to Drill - proposal to drill a wildcat well the Lamb Trust 31B-1-1 on a Fee lease Fee

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its

easements..

6922. Trust Lands Administration
Other Proposed Actions; State Land Proposals
Sec. 16, T10S, R18E; Uintah Co; Easement #1124

Two paleontological localities with vertebrate fossils, Utah Paleontological Localities Un 1699 and Un 1700, are recorded in our files in this project area. The project is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements and, if these known critical fossil localities are to be impacted, they should be mitigated by a permitted paleontologist.

6943. Division of Forestry, Fire and State Lands
Short Turn Around; Drilling Permits; Sec. 26, T12S, R24E
Uintah Co.
Application for Permit to Drill - proposal to drill a wildcat well the Long Draw 12-24-31-26 on a State lease ML-47090

Although there are no paleontological localities recorded in our files in this project area, it is mapped as T3 (Eocene Uinta and Duchesne River Formations) on the Utah State Geological Map. The Uinta and Duchesne River Formations are among the most paleontological sensitive rock units in Utah and have a strong potential for yielding significant vertebrate fossil localities. The office of the State paleontologist therefore recommends that a paleontological survey be conducted for this project and its easements.

From: Carolyn Wright
To: Whitney, Diana
Date: 8/17/2006 10:34:36 AM
Subject: Fwd: comments

43-047-38396

FYI

>>> Shelly Quick 08/15/06 12:47 PM >>>
Project Number: 6918, 6917 and 6916
Sponsor: Division of Oil, Gas and Mining
SLB&M: Sec. 32, T10S, R25E
Counties Affected: Uintah
Description: Application for Permit to Drill - proposal to drill the Southam Canyon 10-25-11-32 on a State lease ML-47065
Comments Due to Sponsor 08/22/2006

Comments:

Well must be sited, drilled, and managed to prevent degradation of water quality through measures to limit erosion, limit stormwater runoff, and limit pollutant loading to runoff. 1- Wellpad placement or expansion disturbs soils. Vegetative and/or structural measures to control erosion should be implemented within 60 days of initial soil disturbance to prevent erosion leaving the site from exceeding the tolerable rate as determined by the local office of USDA/NRCS. Such erosion control shall be maintained for the duration of the lease and shall remain in functional operation when the lease or permit is terminated.2- If vegetation surrounding the wellpad does not provide at least 60% ground cover within 60 days of creating the wellpad, engineering practices should be implemented within those 60 days to control erosion. Such engineering measures may include mulching, use of fiber mats, cross slope trenching, contour furrows, rock dams, terracing or such other erosion control practices as are required to prevent erosion from exceeding the tolerable rate. 3- No disturbance or degradation to or of surrounding or nearby soils, native or beneficial vegetation, or riparian areas should be permitted outside of the area defined in the permit. 4- No spills nor runoff of chemicals including hydrocarbons, lubricants, salt water, antifreeze, or other potentially damaging materials should be permitted.5- Before wellpad use is discontinued, permit holder shall restore the site to prevent stormwater runoff from exceeding water quality standards. Erosion from the site shall not exceed the tolerable rate as established by the local office of USDA / NRCS either while the wellpad site is in use, or when it is no longer in active use. No petrochemicals, salt, pesticides, nor other introduced potential pollutants shall be left such that they might be eroded, dissolved, blown, or otherwise carried away to become potential pollutant loads. 6- Employing structural BMPS for access roadways to capture sediment in runoff before it would enter intermittent or perennial streams, washes, or gullies.

From: Carolyn Wright
To: Whitney, Diana
Date: 8/21/2006 9:20:40 AM
Subject: Fwd: comments

43-047-38394

>>> Shelly Quick 8/15/2006 12:47 PM >>>
Project Number: 6918, 6917 and 6916
Sponsor: Division of Oil, Gas and Mining
SLB&M: Sec. 32, T10S, R25E
Counties Affected: Uintah
Description: Application for Permit to Drill - proposal to drill the Southam Canyon 10-25-11-32 on a State lease ML-47065
Comments Due to Sponsor 08/22/2006

Comments:

Well must be sited, drilled, and managed to prevent degradation of water quality through measures to limit erosion, limit stormwater runoff, and limit pollutant loading to runoff. 1- Wellpad placement or expansion disturbs soils. Vegetative and/or structural measures to control erosion should be implemented within 60 days of initial soil disturbance to prevent erosion leaving the site from exceeding the tolerable rate as determined by the local office of USDA/NRCS. Such erosion control shall be maintained for the duration of the lease and shall remain in functional operation when the lease or permit is terminated.2- If vegetation surrounding the wellpad does not provide at least 60% ground cover within 60 days of creating the wellpad, engineering practices should be implemented within those 60 days to control erosion. Such engineering measures may include mulching, use of fiber mats, cross slope trenching, contour furrows, rock dams, terracing or such other erosion control practices as are required to prevent erosion from exceeding the tolerable rate. 3- No disturbance or degradation to or of surrounding or nearby soils, native or beneficial vegetation, or riparian areas should be permitted outside of the area defined in the permit. 4- No spills nor runoff of chemicals including hydrocarbons, lubricants, salt water, antifreeze, or other potentially damaging materials should be permitted.5- Before wellpad use is discontinued, permit holder shall restore the site to prevent stormwater runoff from exceeding water quality standards. Erosion from the site shall not exceed the tolerable rate as established by the local office of USDA / NRCS either while the wellpad site is in use, or when it is no longer in active use. No petrochemicals, salt, pesticides, nor other introduced potential pollutants shall be left such that they might be eroded, dissolved, blown, or otherwise carried away to become potential pollutant loads. 6- Employing structural BMPS for access roadways to capture sediment in runoff before it would enter intermittent or perennial streams, washes, or gullies.

From: Carolyn Wright
To: Whitney, Diana
Date: 8/21/2006 9:19:50 AM
Subject: Fwd: RDCC short turn around responses

FYI

>>> Robert Clark 8/14/2006 10:33 AM >>>
The following comments are provided in response to short turn around items **RDCC #6916** through **RDCC #6921,** and **RDCC #6943.**

RDCC #6916, Comments begin: The proposal of Enduring Resources, LLC to drill the **Southam Canyon 10-25-34-32** wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end. RDCC #6917, Comments begin:** The proposal of Enduring Resources, LLC to drill the **Southam Canyon 10-25-14-32** wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end. RDCC #6918, Comments begin:** The proposal of Enduring Resources, LLC to drill the **Southam Canyon 10-25-11-32** wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end. RDCC #6919, Comments begin:** The proposal of the Houston Exploration Company to drill the **North Horseshoe 5-16-6-22** wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a

permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. The proposed project is also subject to Utah Air Quality Rule R307-205-5, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end. RDCC #6920, Comments begin:** The proposal of Petro-Hunt, LLC to drill the **Vonda H. Christensen Family LP 35A-3-1** wildcat well, in Sanpete County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. 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A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end. RDCC #6943, Comments begin:** The proposal of Enduring Resources, LLC to drill the **Long Draw 12-24-31-26** wildcat well, in Uintah County, may require a permit, known as an Approval Order, from the Executive Secretary of the Air Quality Board if any compressor or pump stations are constructed at the site. If a permit is required, a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The guidelines for preparing an NOI are available on-line at http://www.airquality.utah.gov/Permits/FORMS/NOIGuide8.pdf. 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475 17th Street, Suite 1500
Denver, CO 80202
(303) 573-1222
(303) 573-0461

Enduring Resources

Fax

To:	Helen Sadik-Macdonald	**From:**	Evette Bissett
Fax:	801-359-3940	**Pages:**	7
Phone:		**Date:**	8/30/2006
Re:	Southam Canyon 10-25-14-32	**cc:**	

☐ **Urgent** X **For Review** ☐ **Please Comment**

☐ **Please Reply** ☐ **Please Recycle**

• **Comments**

Corrected cover page and drilling plan

RECEIVED
AUG 30 2006
DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: ML-47065	6. SURFACE: State
1A. TYPE OF WORK: DRILL ☑ REENTER ☐ DEEPEN ☐	7. IF INDIAN, ALLOTTEE OR TRIBE NAME:
B. TYPE OF WELL: OIL ☐ GAS ☑ OTHER _____ SINGLE ZONE ☐ MULTIPLE ZONE ☑	8. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: Enduring Resources, LLC	9. WELL NAME and NUMBER: Southam Canyon 10-25-14-32
3. ADDRESS OF OPERATOR: 475 17th St., Ste 1500 CITY Denver STATE CO ZIP 80220 / PHONE NUMBER: (303) 350-5114	10. FIELD AND POOL, OR WILDCAT: Undesignated
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 703' FSL - 1881' FWL SE-SW 32-10S-25E AT PROPOSED PRODUCING ZONE: 658' FSL - 661' FWL SW-SW 32-10S-25E	11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSW 32 10S 25E
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 12.3 Southwest of Bonanza, UT	12. COUNTY: Uintah / 13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): 703' (SL) 658' (BHL)	16. NUMBER OF ACRES IN LEASE: 640 / 17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40 acres
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): 1000' +	19. PROPOSED DEPTH: 5,503 / 20. BOND DESCRIPTION: RLB0008031
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5818' RT-KB	22. APPROXIMATE DATE WORK WILL START: 9/1/2006 / 23. ESTIMATED DURATION: 20 days

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT			
20"	14" line pipe	40	3 yards	Ready Mix		
11"	8-5/8" J-55 24#	2,016	Premium Lead	138 sxs	3.50	11.1
			Premium Tail	138 sxs	1.15	15.8
7-7/8"	4-1/2" N-80 11.6#	5,503	Class G	11 sxs	3.3	11.0
			50/50 Poz Class G	674 sxs	1.56	14.3

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- ☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☑ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
- ☑ COMPLETE DRILLING PLAN
- ☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE Al Arlian g/B DATE 8/30/2006

(This space for State use only)

API NUMBER ASSIGNED: _____ APPROVAL:

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(11/2001) (See Instructions on Reverse Side)

Enduring Resources, LLC
Southam Canyon 10-25-14-32
SE-SW 32-10S-25E (Surface Location)
SW-SW 32-10S-25E (BHL)
Uintah County, Utah
State Lease: ML-47065

ONSHORE ORDER 1 - DRILLING PLAN

1. **Estimated Tops of Geological Markers:**

Formation	Depth (K.B.)
Uinta	Surface
Green River	0
Wasatch	2213
Mesaverde	3346

2. **Estimated Depths of Anticipated Water, Oil, Gas or Other Minerals:**

Substance	Formation	Depth (K.B.)
	KB-Uinta Elevation 5818	
Oil / Gas	Green River	0
Oil /Gas	Wasatch	2213
Oil /Gas	Mesaverde	3346
	Estimated TD	5503

A 11" hole will be drilled to approximately 2000 feet. The depth will be determined by the depth that the Birds Nest zone is encountered. The hole will be drilled 400 feet beyond the top of the Birds Nest zone and surface casing will be set.

3. **Pressure Control Equipment: (3000 psi schematic attached)**

A. Type: Eleven (11) inch double gate hydraulic BOP with eleven (11) inch annular preventer on 3,000 psi casinghead, with 3,000 psi choke manifold equipped per the attached diagram. BOPE as specified in *Onshore Oil & Gas Order Number 2.* A PVT, stroke counter and flow sensor will be installed to check for flow and monitor pit volume.

B. Pressure Rating: 3,000 psi BOPE

C. Kelly will be equipped with upper and lower Kelly valves.

D. Testing Procedure: Annular Preventer

At a minimum, the annular preventer will be pressure tested to 50% of the stack rated working pressure for a period of ten (10) minutes or until provisions of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the annular preventer is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the annular preventer will be functionally operated at least weekly.

Blow-Out Preventer

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the surface casing by a test plug) or to 70% of the internal yield strength of the surface casing (if the BOP is not isolated from the casing by a test plug). Pressure will be maintained for a period of at least ten (10) minutes or until the requirements of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the BOP is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the pipe and blind rams will be activated each trip, but not more than once each day. All BOP drills and tests will be recorded in the IADC driller's log.

E. Miscellaneous Information:

The blowout preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of *Onshore Oil & Gas Order Number 2.*

4. Proposed Casing & Cementing Program:

A. Casing Program: All New

Hole Size	Casing Size	Wt./Ft.	Grade	Joint	Depth Set (MD)
20"	14" O.D.				40' (GL)
11"	8-5/8"	24#	J-55	ST&C	0 – 2,016' (KB) est.
7-7/8"	4-1/2"	11.6#	N-80	LT&C	0 – 5503' (KB)

The surface casing will have guide shoe, 1 joint, insert float collar. Centralize the shoe joint with bowspring centralizers in the middle and top of the joint and the next16 joints with bowspring centralizers on every other collar (8 centralizers total). Thread lock guide shoe.

Casing string(s) will be pressure tested to 0.22 psi/foot of casing string length or 1500 psi, whichever is greater (not to exceed 70% of the internal yield strength of the casing), after cementing and prior to drilling out from under the casing shoe.

B. Casing Design Parameters:

Depth (MD)	Casing	Collapse(psi)/SF	Burst (psi)/SF	Tension(mlbs)/SF
40' (GL)	14" OD			
2016' (KB)	8-5/8", 24#/ft, J55, STC	1370/1.52(a)	2950/3.28(b)	244/5.81(c)
5503' (KB)	4-1/2", 11.6#/ft, N-80, LTC	6350/2.22 (d)	7780/2.96 (e)	223/4.06(f)

(a.) based on full evacuation of pipe with 8.6 ppg fluid on annulus
(b.) based on 8.6 ppg gradient with no fluid on annulus
(c.) based on casing string weight in 8.6 ppg mud
(d.) based on full evacuation of pipe with 10.0 ppg fluid on annulus
(e.) based on 9.2 ppg gradient, gas to surface, with no fluid on annulus, no gas gradient
(f.) based on casing string weight in 9.2 ppg mud

PROPOSED CEMENTING PROGRAM

Surface Casing (if well will circulate)-Cemented to surface

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
8-5/8"	Lead	1516	Premium cement + 16% gel + 0.25 pps celloflake	138	25%	11.1	3.50
8-5/8"	Tail	500	Premium cement + 2% CaC_2 + 0.25 pps celloflake	138	25%	15.8	1.15

A cement top job is required if cement fallback is greater than 10' below ground level. Top job (weight 15.8 ppg, yield 1.15 ft^3/sx) cement will be premium cement w/ 3% $CaCl_2$.+0.25 pps celloflake. Volume as required

Surface Casing (if well will not circulate) - Cemented to surface

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
8-5/8"	Lead	500	Premium cement + 2% $CaCl_2$ + 0.25 pps celloflake	138	25	15.8	1.15
8-5/8"	Top job	As req.	Premium cement + 3% $CaCl_2$ + 0.25 pps celloflake	As Req.		15.8	1.15

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Production Casing and Liner - Cemented TD to 300' above base of surface casing

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft^3/sx)
4-1/2"	Lead	97	Class "G" + 5% NaCl + 12% Gel + 0.25 pps celloflake + 0.2% antifoam + 0.25% fluid loss + 1% extender	14	25	11.0	3.3
4-1/2"	Tail	3690	50/50 POZ Class G + 2% gel +1% $CaCl_2$ + 0.2% dispersant + 0.2% fluid loss + 0.1% antifoam	674	25	14.3	1.56

Cement volumes for the 4-1/2" Production Casing will be calculated to provide a top of cement to 300' above base of surface casing. Cement volumes are approximate and were calculated under the assumption that a gauge hole will be achieved. Actual cement volumes may vary due to variations in the actual hole size and will be determined by running a caliper log on the drilled hole. Actual cement types may vary due to hole conditions and cement contractor used.

All waiting on cement (WOC) times will be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

5. **Drilling Fluids (mud) Program:**

Interval (MD)	Mud Weight	Fluid Loss	Viscosity	Mud Type
0' – 2016' (KB)		No cntrl		Air/mist
2000'-3000' (KB)	8.4-8.6	No cntrl	28-36	Water
3000'-5503' (KB)	8.8-9.8	8 - 10 ml	32-42	Water/Gel

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blowout will be available at the well site during drilling operations.

6. **Evaluation Program:**

Tests: No tests are currently planned.

Coring: No cores are currently planned.

Samples: No sampling is currently planned.

Logging

- Dual Induction – SFL /Gamma Ray/Caliper/SP/TDLT/CNL/ML
  TD to Base Surface Casing
- Cement Bond Log / Gamma Ray:
  TD to Base of Surface Casing or Top of Cement if below Base of Surface Casing

Stimulation: A stimulation or frac treatment will be designed for completion of this well based on openhole log analysis. The drill site, as approved, will be sufficient size to accommodate all completion activities.

7. Abnormal Conditions:

No abnormal temperatures or pressures are anticipated. No H_2S has been encountered or known to exist from previous wells drilled to similar depths in the general area.

Maximum anticipated bottom hole pressure equals approximately 2862 psi (calculated at 0.52psi/foot of hole) and maximum anticipated surface pressure equals approximately 1651 psi (anticipated bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot of hole).

8. Anticipated Starting Dates:

- Anticipated Commencement Date- Within one year of APD issue.
- Drilling Days- Approximately 10 days
- Completion Days - Approximately 10 days
- Anticipate location construction within 30 days of permit issue.

9. Variances:

None anticipated

10. Other:

A Cultural Resource Inventory and Paleontology reconnaissance shall be conducted for the well location, access route and pipeline. The reports shall be submitted to the Division of Oil, Gas and Mining and the School and Institutional Trust lands Administration upon their receipt.

Single Shot directional surveys will be dropped every 2000 feet to monitor hole angle.

From: Ed Bonner
To: Whitney, Diana
Date: 9/12/2006 2:43:10 PM
Subject: Well Clearance

The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

Cochrane Resources, Inc
Divide 32-32 (API 43 019 31487)

Enduring Resources, LLC
Southam Canyon 10-25-11-32 (API 43 047 38395)
Southam Canyon 10-25-14-32 (API 43 047 38396)
Southam Canyon 10-25-34-32 (API 43 047 38401)
Rock House 10-23-34-32 (API 43 047 38470)
East Bench 11-22-31-32 (API 43 047 38273)
Sand Wash 12-22-23-32 (API 43 047 38285)
Sand Wash 12-22-44-32 (API 43 047 38286)
Buck Camp 12-22-23-2 (API 43 047 38483)
Buck Camp 12-22-14-2 (API 43 047 38482)

The Houston Exploration Company
North Horseshoe 5-16-6-22 (API 43 047 38406)

Newfield Production Company
Horseshoe Bend State 4-28-6-21 (API 43 047 38366)

XTO Energy, Inc
State of Utah 17-8-19-11D (API 43 015 30695)
State of Utah 17-8-20-13 (API 43 015 30698)

If you have any questions regarding this matter please give me a call.

CC: Davis, Jim; Garrison, LaVonne; Hill, Brad; Hunt, Gil

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah

Department of Natural Resources

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA
Division Director

September 21, 2006

Enduring Resources, LLC
475 17th St., Ste. 1500
Denver, CO 80202

Re: Southam Canyon 10-25-14-32 Well, 703' FSL, 1881' FWL, SE SW, Sec. 32, T. 10 South, R. 25 East, Bottom Location 658' FSL, 661' FWL, SW SW, Sec. 32, T. 10 South, R. 25 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-38396.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Uintah County Assessor
SITLA

Operator: Enduring Resources, LLC

Well Name & Number Southam Canyon 10-25-14-32

API Number: 43-047-38396

Lease: ML-47065

Location:	SE SW	**Sec.** 32	**T.** 10 South	**R.** 25 East
Bottom Location:	SW SW	**Sec.** 32	**T.** 10 South	**R.** 25 East

Conditions of Approval

1. General

   Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

   The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

   - 24 hours prior to cementing or testing casing
   - 24 hours prior to testing blowout prevention equipment
   - 24 hours prior to spudding the well
   - within 24 hours of any emergency changes made to the approved drilling program
   - prior to commencing operations to plug and abandon the well

   The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

   - Dan Jarvis at (801) 538-5338
   - Carol Daniels at (801) 538-5284 (spud)

3. Reporting Requirements

   All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

5. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.

6. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

7. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

8. Surface casing shall be cemented to the surface.

9. Operator shall comply with applicable recommendations resulting from Resource Development Coordinating Committee review. Statements attached.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

CONFIDENTIAL

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: ML-47065

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: n/a

7. UNIT or CA AGREEMENT NAME: n/a

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: Southam Canyon 10-25-14-32

2. NAME OF OPERATOR: Enduring Resources, LLC

9. API NUMBER: 4304738396

3. ADDRESS OF OPERATOR: 475 17th Street, Suite 1500 CITY Denver STATE CO ZIP 80202

PHONE NUMBER: (303) 350-5719

10. FIELD AND POOL, OR WILDCAT: Undesignated

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 703' FSL - 1881' FWL

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 32 10S 25E S

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Request for APD Extension
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Enduring Resources, LLC respectfully request an extension to the expiration date of this Application for Permit to Drill ....

FROM: 9/21/2007
TO: 9/21/2008

Approved by the Utah Division of Oil, Gas and Mining

Date: 09-19-07

By:

COPY SENT TO OPERATOR
Date: 9-19-07
Initials: PM

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE DATE 9/18/2007

(This space for State use only)

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DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

[redacted]

Application for Permit to Drill
Request for Permit Extension
Validation
(this form should accompany the Sundry Notice requesting permit extension)

API: 4304738396
Well Name: Southam Canyon 10-25-14-32
Location: 703' FSL - 1881' FWL, SESW, Sec 32, T10S-R25E
Company Permit Issued to: Enduring Resources, LLC
Date Original Permit Issued: 9/21/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes☐No☐

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes☐No☑

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes☐No☑

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes☐No☑

Has the approved source of water for drilling changed? Yes☐No☑

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes☐No☑

Is bonding still in place, which covers this proposed well? Yes☑No☐

9/18/2007

Signature Date

Title: Landman - Regulatory Specialist

Representing: Enduring Resources, LLC

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DIV. OF OIL, GAS & MINING

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:	ML-47065
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	n/a
7. UNIT or CA AGREEMENT NAME:	n/a
8. WELL NAME and NUMBER:	Southam Canyon 10-25-14-32
9. API NUMBER:	4304738396
10. FIELD AND POOL, OR WILDCAT:	Undesignated

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER _____

2. NAME OF OPERATOR: Enduring Resources, LLC

3. ADDRESS OF OPERATOR: 475 17th Street, Suite 1500 CITY Denver STATE CO ZIP 80202 PHONE NUMBER: (303) 350-5114

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 703' FSL - 1881' FWL COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 32 10S 25E S STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: _____	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
_____	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Request for APD Extension
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Enduring Resources, LLC respectfully request an extension to the expiration date of this Application for Permit to Drill ....

FROM: 9/19/2008
TO: 9/19/2009

Approved by the
Utah Division of
Oil, Gas and Mining

Date: 09-23-08
By: _____

NAME (PLEASE PRINT) Alvin R. (Al) Arlian TITLE Landman - Regulatory Specialist

SIGNATURE _____ DATE 9/5/2008

(This space for State use only)

COPY SENT TO OPERATOR
Date: 9.23.2008
Initials: KS

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SEP 18 2008
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

[redacted]

Application for Permit to Drill
Request for Permit Extension
Validation
(this form should accompany the Sundry Notice requesting permit extension)

API: 4304738396
Well Name: Southam Canyon 10-25-14-32
Location: 703' FSL - 1881' FWL, SESW, Sec 32, T10S-R25E
Company Permit Issued to: Enduring Resources, LLC
Date Original Permit Issued: 9/21/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes☐ No☐

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes☐ No☑

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes☐ No☑

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes☐ No☑

Has the approved source of water for drilling changed? Yes☐ No☑

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes☐ No☑

Is bonding still in place, which covers this proposed well? Yes☑ No☐

Signature

9/5/2008
Date

Title: Administrative Assistant

Representing: Enduring Resources, LLC

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SEP 18 2008
DIV. OF OIL, GAS & MINING

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

October 19, 2009

Enduring Resources, LLC
475 17TH Street Ste 1500
Denver, CO 80202

Re: APD Rescinded – Southam Canyon 10-25-14-32, Sec. 32, T.10S, R. 25E
Uintah County, Utah API No. 43-047-38396

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on September 21, 2006. On September 19, 2007 and September 23, 2008 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective October 19, 2009.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason
Environmental Scientist

cc: Well File
SITLA, Ed Bonner

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